

**UNITED STATES DISTRICT COURT FOR THE  
SOUTHERN DISTRICT OF NEW YORK**

IN RE LONDON SILVER FIXING, LTD.  
ANTITRUST LITIGATION

14-MD-02573-VEC  
14-MC-02573-VEC

This Document Relates to:

The Honorable Valerie E. Caproni

ALL ACTIONS

**CONSOLIDATED AMENDED CLASS ACTION COMPLAINT**

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**Silver is the devil’s metal . . . . People look at silver and think it’s an easy market. Those people get carried out on a stretcher.**

—John Levin, HSBC Managing Director of Global Metals Trading  
Financial Times Silver Investment Conference  
London, June 9, 2010<sup>1</sup>

COMES NOW Plaintiffs (“Plaintiffs”), by and through their undersigned counsel, for their Complaint brought under the Sherman Antitrust Act, the Clayton Antitrust Act, the Donnelly Antitrust Act, the Commodity Exchange Act, and the common law of Unjust Enrichment, on behalf of themselves and a Class of those similarly situated under Rule 23 of the Federal Rules of Civil Procedure, for treble damages, disgorgement and restitution, and injunctive and other relief, against Defendants, for their violations of law from at least January 1, 1999, through the date on which the effects of Defendants’ unlawful conduct cease (“Class Period”), and, upon knowledge, information, belief, and investigation of counsel, alleges:

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<sup>1</sup> *United Kingdom: Buy and Hold Beats Trading*, TENDERSINFO June 12, 2010.

## I. NATURE OF THE ACTION

1. Until very recently, the price of silver was set by a combination of three of the world's largest multinational banks—the members of The London Silver Market Fixing, Ltd. The three banks are Deutsche Bank AG (“Deutsche”), HSBC U.S.A. Bank, N.A. (“HSBC”), and The Bank of Nova Scotia-ScotiaMocatta (“Scotiabank”) (collectively the “Fixing Members”).

2. The name of the process was the “Silver Fix.” The Silver Fix determined the benchmark price of silver worldwide from 1897 until August 14, 2014. A “City of London Institution,” the Silver Fix played a “crucial role in the roughly \$30 billion a year global trade in silver,”<sup>2</sup> although it had “lost its luster in recent years due to concerns about transparency and vulnerability to manipulation.”<sup>3</sup>

3. The Fixing Members literally fixed the price of silver once per day, every business day, through a secure conference call, at noon, London time.<sup>4</sup> There were no outside observers, and Plaintiffs are aware of no recordings or transcripts ever released. No regulatory body oversaw the Silver Fix. No one except Defendants have first-hand knowledge of what really occurred on the conference calls.

4. Through this clandestine device, these three Defendants, by their concerted action, dictated the price of physical silver and thereby the prices of silver financial instruments,

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<sup>2</sup> Press Release, *The new LBMA Silver Price heralds a new era in precious metals benchmarks*, THOMPSON REUTERS (Aug. 5, 2014), <http://blog.financial.thomsonreuters.com/new-silver-fix-heralds-new-era-precious-metals-benchmarks/>.

<sup>3</sup> *CME and Thomson Reuters to set silver benchmark*, THE FINANCIAL TIMES (July 11, 2014), <http://www.ft.com/intl/cms/s/0/7f838fc4-08d8-11e4-8d27-00144feab7de.html?siteedition=uk#axzz38yxp1nAQ>.

<sup>4</sup> A list setting forth the price of each daily Silver Fix during the Class Period up until its demise on August 14, 2014, is appended hereto.

such as silver futures and options, the prices of which are directly and proximately caused by, and directly linked to, the price of physical silver.

5. U.S. and European authorities are presently investigating the Silver Fix. In March 2013, the U.S. Commodity Futures Trading Commission (“CFTC”) said that it had “started internal discussions on whether the daily setting of gold and silver benchmarks is open to manipulation.”<sup>5</sup> Just prior to this announcement, CFTC Commissioner, Bart Chilton, was quoted as saying, “We’ve witnessed blatant and brazen monkeying with the marks. . . . [T]he idea that pervasive manipulation, or attempted manipulation, is so widespread should make us all query the veracity of the other key marks. What about the gold and **silver fixes in London** . . . . Why would they be any different in the minds of those that may have sought to push or pull rates?”<sup>6</sup>

6. These investigations led Deutsche Bank, which had been a Fixing Member for twenty years, to withdraw from the panel.<sup>7</sup> Deutsche Bank tried to sell its seat on the panel, but, tellingly, there were no buyers.<sup>8</sup>

7. In the wake of the pending governmental inquiries, Deutsche Bank’s resignation, and with only two panel members left, the Fixing Members announced that they would disband

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<sup>5</sup> *How London’s gold and silver price benchmarks are ‘fixed,’* REUTERS (Jan 17, 2014), <http://uk.reuters.com/assets/print?aid=UKBREA0G19J20140117>.

<sup>6</sup> *Statement of Commissioner Bart Chilton before the International Roundtable on Financial Benchmarks*, Washington, D.C. (February 26, 2013), <http://www.cftc.gov/PressRoom/SpeechesTestimony/chiltonstatement022613> (emphasis added).

<sup>7</sup> *Deutsche resigns gold and silver price-fix seats*, FINANCIAL TIMES (April 29, 2014), <http://www.ft.com/intl/cms/s/0/f00383f2-cfb3-11e3-a2b7-00144feabdc0.html?siteedition=uk#axzz38yxplnAQ>.

<sup>8</sup> *CME and Thomson Reuters to set silver Benchmark*, FINANCIAL TIMES (July 11, 2014), <http://www.ft.com/intl/cms/s/0/7f838fc4-08d8-11e4-8d27-00144feab7de.html?siteedition=uk#axzz38yxplnAQ>.

their combination as of August 14, 2014.<sup>9</sup> A new process was set to replace the Silver Fix. “The century-old method of setting silver prices—daily chats among a small coterie of banks—[wa]s being scrapped for something more modern.”<sup>10</sup>

8. In anticipation of the end of the Silver Fix, FORBES quoted Andrew Caminschi, “a researcher at the University of Western Australia and a subject matter expert,” to say: “The best part of the London Silver Price Fixing is that it will soon disappear.”<sup>11</sup>

9. Mr. Caminschi, a recognized authority in the field, has conducted an extensive study of the Silver Fix, which outlines “undeniable” collusion and manipulation.<sup>12</sup> He was interviewed regarding his important study in June 2014 by KITCO NEWS for an article entitled, *Good News -- Silver Fix is Ending*.<sup>13</sup> The article quoted Caminschi to say about the Fix: “It is statistically undeniable . . . There is this trade advantage that is granted to the fix participants.” Caminschi’s study found that it was the statistically significant difference in prices of silver — both physical and futures — around the noon Silver Fix, that created a distinct tradable advantage of up to 40 basis points per day for the Fixing Members and other insiders, like

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<sup>9</sup> Press Release, *The London Silver Market Fixing Limited* REUTERS (May 14, 2014), at <http://www.reuters.com/article/2014/05/14/idUSnMKWWsY3ca+1e8+MKW20140514>.

<sup>10</sup> *Bullion Fixes in Flux*, THE WALL STREET JOURNAL (June 18, 2014), <http://online.wsj.com/articles/bullion-industry-to-meet-in-july-to-discuss-london-gold-fix-overhaul-1403082075>.

<sup>11</sup> *Research Demonstrates Price Suppression During Silver Fixing*, FORBES (July 18, 2014), <http://www.forbes.com/sites/kitconews/2014/07/18/research-demonstrates-price-suppression-during-silver-fixing/>.

<sup>12</sup> Andrew Caminschi, *Any Silver Linings? London Silver Fixing impact on public markets before and after the introduction of contemporaneous futures trading*, SSRN-id2461098 (July 7, 2014).

<sup>13</sup> *Good News Silver Fix is Ending*, KITCO NEWS (July 18, 2014), <http://www.kitco.com/news/video/show/on-the-spot/733/2014-07-18/Good-News-Silver-Fix-Is-Ending--Andrew-Caminschi>.



Defendant UBS. This advantage persisted “in bull markets, bear markets, and everything in between” defying price trends in the broader market throughout the Class Period.<sup>14</sup>

10. The Class Counsel has retained Andrew Caminschi as an expert consultant for this case. His analysis, further alleged below, has uncovered anomalous pricing behavior around the time of the Silver Fix that is consistent with a systematic suppression of silver prices. This anomalous pricing behavior, which is highly indicative of pricing information being “leaked” to the silver market prior to the end of the Silver Fix, had a persistent impact on the prices of silver and silver financial instruments during the Class Period.<sup>15</sup>

11. Mr. Caminschi has additionally demonstrated that this information leakage, which manifests itself in the form of anomalous spikes in both the trading volume of exchange traded silver futures and volatility of silver prices in the spot market prior to the end of the daily conference call, creates a significant advantage to “informed traders,” those with knowledge of the Fix, like the Defendants, compared to “uninformed” Class Members. Furthermore, the spikes in volume and volatility observed in the market while the Silver Fix is still ongoing, are highly suggestive of trading by the Fixing Members and their co-conspirators, as they place trades in the market prior to the Fix being released to the public to capitalize on their informational advantage.

12. The Class Counsel also retained Professor Rosa Abrantes-Metz, another expert economist in the field for this case. Professor Abrantes-Metz, as further alleged below, confirms that, throughout the Class Period, pricing dynamics around the Silver Fix are indicative of a

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<sup>14</sup> A video interview of Professor Caminschi may be found at <http://www.kitco.com/news/video/show/on-the-spot/733/2014-07-18/Good-News-Silver-Fix-Is-Ending--Andrew-Caminschi>.

<sup>15</sup> See Andrew Caminschi, *Any Silver Linings? London Silver Fixing Impact on Public Markets Before and After the Introduction of Contemporaneous Futures Trading* (hereinafter *Silver Linings*), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2461098](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2461098)

systematic suppression of silver prices, with large price declines during the Silver Fix occurring at an abnormally high frequency.<sup>16</sup> The size of these price decreases is also highly suspect, as they normally dwarf any price increases observed during the Silver Fix.

13. Professor Abrantes-Metz has also demonstrated that the impact of this systematic price suppression extends beyond the few minutes surrounding the Silver Fix, where large price drops are frequently observed, and extends to other days that do not exhibit such obvious price declines. This price impact is connected directly to the Defendants activity in the spot silver market, as represented by their bid and ask price quotes, which initiate the downward price trend observed around the start of the Silver Fix.

14. This Complaint thus follows government investigations, an extensive review of the evolving public record, ongoing analysis by leading economists in the field—including two prominent experts retained by counsel for Plaintiffs—and, significantly, the abrupt end of the Silver Fix—after 117 years in existence—on August 14, 2014.

15. The Complaint also follows the replacement of the “Silver Fix” with the “London Silver Price.” On May 14, 2014, it was announced that the Silver Fix would cease operations in three months. The venerable London Bullion Market Association (“LBMA”) and others quickly embarked on a search for a replacement for the Silver Fix. After bids by the likes of the London Metal Exchange, Intercontinental Commodity Exchange, and Platts, to run the new benchmarking process, the LBMA settled upon the CME Group and Thomson Reuters to run the new fix, which would replace the old fix, under a different name: the “London Silver Price.”

16. While losing the “unfortunate name,” in favor of a bland one, and the “private teleconference,” in favor of electronic trading, THE FINANCIAL TIMES reports that “anyone

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<sup>16</sup> See Rosa M. Abrantes-Metz & Albert D. Metz, *Was The London Silver Fixing Fixed For Years?* (November 2014) (unpublished manuscript on file with counsel)

thinking there has been a complete change in the way the daily snapshot of the silver market is conducted would be mistaken. The new benchmark . . . keeps some of the main features of the silver fixing, in particular the auction-style process used to calculate the reference price.”<sup>17</sup> Two of the other main features that continue are HSBC and Scotiabank, each of which is (or remains) on the London Silver Price panel.

17. The Silver Fix has finally ended. But the damage has been done. And it remains to be seen whether the new regime will be more than a name change. Plaintiffs, on behalf of themselves and a class of those similarly damaged, seek relief from This Honorable Court for Defendants’ antitrust violations, commodity manipulation, and unjust enrichment from at least January 1, 1999, through the date on which the effects of Defendants’ unlawful conduct cease.

18. Given the ongoing government investigations into the Silver Fix and the significant amount of economic evidence presented in this complaint, Plaintiffs believe that further evidentiary support for their claims, as alleged herein, will be revealed after a reasonable opportunity for discovery.

## **II. PARTIES**

### **A. Plaintiffs**

19. Plaintiff Norman Bailey (“Bailey”) is a natural person, who resides in Ontario, Canada. Plaintiff Bailey engaged in U.S.-based transactions in Chicago Board of Trade (“CBOT”) silver futures contracts, Commodity Exchange, Inc. (“COMEX”) silver futures contracts and options during the Class Period at artificial prices proximately caused by Defendants’ unlawful manipulation and restraint of trade and as a consequence thereof was damaged and suffered legal injury.

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<sup>17</sup> *New silver price is ‘improvement’ on fix*, THE FINANCIAL TIMES (July 16, 2014), <http://www.ft.com/intl/cms/s/0/4053ff04-0ccb-11e4-90fa-00144feabdc0.html#axzz38yxp1nAQ>.

20. Plaintiff Robert Ceru (“Ceru”) is a natural person, who resides in the State of New York. Plaintiff Ceru engaged in U.S.-based transactions of physical silver during the Class Period at artificial prices proximately caused by Defendants’ unlawful manipulation and restraint of trade and as a consequence thereof was damaged and suffered legal injury.

21. Plaintiff Christopher DePaoli (“DePaoli”) is a natural person, who resides in the State of California. Plaintiff DePaoli engaged in U.S.-based transactions in COMEX silver futures contracts, COMEX “miNY” silver futures contracts and options, and NYSE LIFFE mini silver futures contracts during the Class Period at artificial prices proximately caused by Defendants’ unlawful manipulation and restraint of trade and as a consequence thereof was damaged and suffered legal injury.

22. Plaintiff John Hayes (“Hayes”) is a natural person, who resides in the State of Florida. Plaintiff Hayes engaged in U.S.-based transactions in COMEX silver futures contracts, CBOT mini silver futures contracts, and options on NYSE LIFFE silver futures contracts during the Class Period at artificial prices proximately caused by Defendants’ unlawful manipulation and restraint of trade and as a consequence thereof was damaged and suffered legal injury.

23. Plaintiff Laurence Hughes (“Hughes”) is a natural person, who resides in the State of California. Plaintiff Hughes engaged in U.S.-based transactions in COMEX “miNY” silver futures contracts during the Class Period at artificial prices proximately caused by Defendants’ unlawful manipulation and restraint of trade and as a consequence thereof was damaged and suffered legal injury.

24. Plaintiff KPFF Investment, Inc. f/k/a KP Investments, Inc. (“KPFF”) is a California corporation with its principal place of business located in Irvine, California. Plaintiff KPFF engaged in U.S.-based transactions in physical silver during the Class Period at artificial

prices proximately caused by Defendants' unlawful manipulation and restraint of trade and as a consequence thereof was damaged and suffered legal injury.

25. Plaintiff Kevin Maher ("Maher") is a natural person, who resides in the State of New York. Plaintiff Maher engaged in U.S.-based transactions in COMEX silver futures contracts and options during the Class Period at artificial prices proximately caused by Defendants' unlawful manipulation and restraint of trade and as a consequence thereof was damaged and suffered legal injury.

26. Plaintiff Eric Nalven ("Nalven") is a natural person, who resides in the State of Florida. Plaintiff Nalven engaged in U.S.-based transactions in CBOT mini silver futures contracts, NYSE LIFFE mini silver futures contracts, and COMEX silver futures contracts during the Class Period at artificial prices proximately caused by Defendants' unlawful manipulation and restraint of trade and as a consequence thereof was damaged and suffered legal injury.

27. Plaintiff J. Scott Nicholson ("Nicholson") is a natural person, who resides in the State of Washington. Plaintiff Nicholson engaged in U.S.-based transactions in COMEX silver futures contracts during the Class Period at artificial prices proximately caused by Defendants' unlawful manipulation and restraint of trade and as a consequence thereof was damaged and suffered legal injury.

28. Plaintiff Don Tran ("Tran") is a natural person, who resides in the State of California. Plaintiff Tran engaged in U.S.-based transactions in options on COMEX silver futures during the Class Period at artificial prices proximately caused by Defendants' unlawful manipulation and restraint of trade and as a consequence thereof was damaged and suffered legal injury.

**B. Defendants**

**1. The London Silver Market Fixing, Ltd.**

29. Defendant The London Silver Market Fixing, Ltd. is a British private company with its principal place of business located in London. The London Silver Market Fixing, Ltd. administered the Silver Fix for its three member banks—Defendants Deutsche Bank AG, HSBC Bank (U.S.A.), NA, and The Bank of Nova Scotia.

30. As of January 22, 2015, The London Silver Market Fixing, Ltd. remained an active U.K. corporation.

**2. Deutsche Bank Defendants**

31. Defendant Deutsche Bank AG is a German *aktiengesellschaft* with its principal place of business located in Frankfurt, Germany. It owns 100% of the equity and voting interests in Defendants Deutsche Bank Americas Holding Corporation, DB U.S. Financial Markets Holding Corporation, Deutsche Bank Securities, Inc., Deutsche Bank Trust Corporation, Deutsche Bank Trust Company Americas, and Deutsche Bank AG, New York Branch.

32. Deutsche Bank AG was a member of the London Silver Market Fixing, Ltd. during the entire Class Period until August 14, 2014, when it withdrew from the LBMA Silver fixing panel.

33. Deutsche Bank AG was a Non-Clearing Member Firm in both the NYMEX and COMEX during at least part of the Class Period.

34. Deutsche Bank AG filed its U.S. Resolution Plan on July 1, 2014 with the U.S. Federal Reserve Board, the Federal Deposit Insurance Corporation and the Financial Stability Oversight Counsel. Deutsche Bank AG reported that its organizational structure is “aligned to affirm its commitment to the universal banking model and to its five existing corporate divisions,” including the Corporate Banking & Securities division housing the financial

derivatives and precious metals businesses. In December 2013, the Deutsche Bank AG Corporate Banking & Securities division announced that it was significantly scaling back its commodities business and “instead refocusing its commodities’ efforts on its core competencies of financial derivatives and precious metals.” In November 2014, Deutsche Bank AG announced it was winding down its physical precious metals trading business.

35. Deutsche Bank AG designated eight U.S. material entities: Deutsche Bank AG New York Branch; Deutsche Bank Securities Inc.; Deutsche Bank Trust Corporation; Deutsche Bank Trust Company Americas; DB Services Americas, Inc.; DB Services New Jersey, Inc.; Deutsche Bank Americas Holding Corp.; and Deutsche Bank National Trust Company.

36. Defendant Deutsche Bank AG New York Branch is a wholesale branch of Deutsche Bank AG. It is licensed by the New York State Department of Financial Services and regulated by the Federal Reserve. Deutsche Bank AG and Deutsche Bank AG New York Branch are also regulated by the CFTC as a registered swap dealer.

37. Defendant Deutsche Bank Securities, Inc. is a Delaware corporation and wholly-owned subsidiary of Deutsche Bank U.S. Financial Markets Holding Corporation, which is a wholly-owned subsidiary of Taunus Corporation, which in turn is wholly-owned by Deutsche Bank AG. It is a registered broker-dealer and investment advisor with the Securities Exchange Commission and a registered Futures Commission Merchant and commodity pool operator with the CFTC. It is a member of the Financial Industry Regulatory Authority, the Securities Investor Protection Corporation and the National Futures Association, with 21 registered branches located throughout the U.S. and total assets of \$226 billion. It is a member of the New York Stock Exchange.

38. Defendant Deutsche Bank Trust Corporation is a New York-chartered bank holding company regulated by the Federal Reserve and wholly-owned subsidiary of Deutsche Bank AG. It is a registered bank and financial holding company under the Bank Holding Company Act of 1956.

39. Defendant Deutsche Bank Trust Company Americas is a New York banking corporation and wholly-owned subsidiary of Deutsche Bank Trust Corporation, which is a wholly-owned subsidiary of Deutsche Bank AG. It is a licensed New York State-chartered insured depository institution regulated by the New York State Department of Financial Services, member of the Federal Reserve, an FDIC-insured bank, and a transfer agent registered with the Securities Exchange Commission.

40. Defendant Deutsche Bank Americas Holding Corporation is a Delaware corporation with its principal place of business located at 60 Wall Street, New York, NY 10005. It is a second tier holding company for Deutsche Bank AG subsidiaries in the United States.

41. Defendant DB U.S. Financial Markets Holding Corporation is a Delaware corporation with its principal place of business located at 60 Wall Street, New York, NY 10005. It is a second tier holding company for Deutsche Bank AG subsidiaries in the United States.

42. Defendants Deutsche Bank AG; Deutsche Bank Americas Holding Corporation; DB U.S. Financial Markets Holding Corporation; Deutsche Bank Securities, Inc.; Deutsche Bank Trust Corporation; Deutsche Bank Trust Company Americas; and Deutsche Bank AG, New York Branch, are collectively referred to herein as “Deutsche Bank” or “Deutsche.”

43. Deutsche Bank AG operates an electronic platform, Autobahn, which allows market participants to electronically trade commodities, including silver. Since 1996, Autobahn has provided 24-hour access to Deutsche Bank’s customers, including those in the United States.



44. Deutsche Bank was the sixteenth most active U.S. market maker during the Class Period for the silver spot market.

45. Deutsche Bank is a member of the unlawful combination and conspiracy alleged herein, from which, to Plaintiffs' knowledge, it has not effectively withdrawn.

### **3. HSBC Defendants**

46. Defendant HSBC Holdings plc is a British public limited company with its principal place of business in London. It owns 100% the equity and voting interests in Defendants HSBC North America Holdings Inc., HSBC Bank (U.S.A.), N.A., and HSBC USA Inc.

47. HSBC maintains COMEX-registered silver depositories (vaults) in which it stores silver at 1 West 39<sup>th</sup> St., SC 2 Level, New York, NY, and 425 Sawmill River Rd. Ardsley, NY.<sup>18</sup> As of January 22, 2015, HSBC's COMEX-registered New York silver vaults held nearly 35 million metric tons of physical silver.<sup>19</sup>

48. HSBC Holdings plc filed its U.S. Resolution Plan with the U.S. Federal Reserve Board on July 1, 2013. HSBC Holdings plc identified six U.S. material entities: HSBC North America Holdings Inc.; HSBC USA Inc.; HSBC Bank USA, National Association; HSBC Securities (USA) Inc.; HSBC Technology & Services (USA) Inc.; and HSBC Finance Corporation. HSBC Holdings plc identified that one of its three U.S. global markets core business lines is metals, which provides a hub for its U.S. clients to engage in spot, forwards, swaps, lending, and custodial services.

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<sup>18</sup> *Ltr to David Stawick*,

<http://www.cftc.gov/stellent/groups/public/@rulesandproducts/documents/ifdocs/rul082310nymexandcomex001.pdf>

<sup>19</sup> [http://www.cmegroup.com/delivery\\_reports/Silver\\_stocks.xls](http://www.cmegroup.com/delivery_reports/Silver_stocks.xls)

49. Defendant HSBC North America Holdings Inc. is a Delaware corporation and the top level holding company for HSBC Holdings plc's operations in the U.S. Its principal place of business is located at 452 Fifth Avenue, New York, NY 10018.

50. Defendant HSBC USA Inc. is a Maryland corporation and an intermediate level holding company for HSBC Holdings plc's operations in the U.S. Its principal subsidiary is HSBC Bank USA, National Association.

51. Defendant HSBC Bank USA, N.A. is HSBC Holdings plc's principal U.S. banking subsidiary and is a national banking association chartered by the Office of the Comptroller of the Currency, with 253 branches in the U.S. and 22 representative offices in the U.S., including 165 branches in the State of New York. Its main office is in McLean, Virginia, and its principal executive offices are located at 452 Fifth Avenue, New York, NY. Its domestic operations are located primarily in the State of New York. HSBC Bank USA, N.A. is subject to regulation by the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Consumer Financial Protection Bureau and the Federal Reserve Board. HSBC Bank USA, National Association is the key metals risk management arm of HSBC.

52. HSBC Bank USA, N.A. was a member of the London Silver Market Fixing Ltd. during the entire Class Period until August 14, 2014.

53. HSBC Bank USA, N.A. is a member of the LBMA London Silver Fixing Panel.

54. HSBC Bank USA, N.A. was a COMEX Division Non-Clearing Member Firm during at least part of the Class Period.

55. HSBC Securities (USA) Inc. is a Delaware corporation and is a registered broker-dealer of securities under the Securities Exchange Act of 1934; a registered Futures Commission Merchant with the CFTC; and a registered swap dealer with the CFTC. It is a member of the

Financial Industry Regulatory Authority, the New York Stock Exchange, Inc., CME Group, Inc. (“CME”), Intercontinental Exchange (“ICE”), LCH Clearnet Ltd. (“LCH”), and the Options Clearing Corporation. It is eligible to clear over-the-counter derivatives at the CME, ICE, and LCH.

56. HSBC Securities (USA), Inc. was a NYMEX Clearing Member Firm during at least part the Class Period.

57. Defendants HSBC Holdings plc, HSBC North America Holdings Inc., HSBC Bank (U.S.A.), N.A., and HSBC USA Inc. are collectively referred to herein as “HSBC.”

58. HSBC is one of the world’s largest metals custodians and the only over-the-counter market maker with foundations in gold, silver, platinum, and palladium. It has a metals trading hub and analyst teams in New York, out of which it offers services for everything in the precious metals value chain—including financing, exploration and development, operations, reclamation, storage and manufacturing, hedging, vaulting, and leasing.

59. As a dealer in precious metals, HSBC “frequently maintains large open positions on U.S. futures markets,” including entering into cash, forward, and options transactions with its U.S. clients and market participants.<sup>20</sup>

60. HSBC was the sixth most active market maker in the silver spot market during the Class Period.

61. HSBC is a member of the unlawful combination and conspiracy alleged herein, from which, to Plaintiffs’ knowledge, it has not effectively withdrawn.

#### **4. Scotiabank Defendants**

62. Defendant The Bank of Nova Scotia, commonly known as Scotiabank, is a Canadian bank with its principal place of business in Toronto. It owns 100% the equity and

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<sup>20</sup> [http://www.cftc.gov/ucm/groups/public/@newsroom/documents/file/metalmarkets032510\\_charles.pdf](http://www.cftc.gov/ucm/groups/public/@newsroom/documents/file/metalmarkets032510_charles.pdf)

voting interests in Defendants Scotia Capital (USA) Inc., Scotiabanc Inc., Scotia Holdings (US) Inc., Scotia Capital (USA) Inc., and The Bank of Nova Scotia Trust Company of New York.

63. The Bank of Nova Scotia's U.S. core business lines include its Global Banking and Markets division, known as ScotiaMocatta. ScotiaMocatta "deals in precious and base metals trading, finance, and physical metal distribution." ScotiaMocatta operates as a business through The Bank of Nova Scotia New York Agency. ScotiaMocatta operates its precious metals wholesale services at 250 Vesey Street, 24th floor, New York, NY, 10281, which is operated by the Bank of Nova Scotia Managing Director, Bimal Das.

64. Scotiabank maintains a COMEX-registered silver depository (vault) in which it stores silver at 230-59 International Airport Center Blvd., Building C, Ste. 120, Jamaica, Queens, NY.<sup>21</sup> The Bank of Nova Scotia, through its ScotiaMocatta division, holds nearly ten million troy ounces of exchange-eligible silver bullion in this vault.<sup>22</sup> As of October 31, 2012, Scotiabank had assets in precious metals, including silver, totaling approximately \$12,387,000,000. As of January 22, 2015, Scotiabank's COMEX-registered New York silver vault held more than 9 million metric tons of physical silver.<sup>23</sup>

65. The Bank of Nova Scotia was a COMEX Clearing Member during at least part of the Class Period.

66. The Bank of Nova Scotia reported to the CFTC that its traders based in New York held COMEX futures and options positions during at least part of the class period.<sup>24</sup>

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<sup>21</sup>

<http://www.cftc.gov/stellent/groups/public/@rulesandproducts/documents/ifdocs/rul082310nymexandcomex001.pdf>

<sup>22</sup> See CME Group, Warehouse Depositories and Stocks, at <http://www.cmegroup.com/trading/energy/nymex-delivery-notices.html> (CME Report dated Jan. 23, 2014); CFTC Archives, <http://www.cftc.gov/files/submissions/rules/approvals/2006/comexscotiamocatta.pdf> ("ScotiaMocatta Depository (SMD) is a division, not a subsidiary, of The Bank of Nova Scotia.")

<sup>23</sup> [http://www.cmegroup.com/delivery\\_reports/Silver\\_stocks.xls](http://www.cmegroup.com/delivery_reports/Silver_stocks.xls)

<sup>24</sup> ScotiaMocatta Commitments of Traders (CFTC), available at [http://www.scotiamocatta.com/scpt/scotiamocatta/prec/pmcftc\\_weekly.pdf](http://www.scotiamocatta.com/scpt/scotiamocatta/prec/pmcftc_weekly.pdf).

67. The Bank of Nova Scotia filed its U.S. Resolution Plan on December 20, 2013 to the U.S. Federal Reserve Board, the Federal Deposit Insurance Corporation and the Financial Stability Oversight Counsel. The Bank of Nova Scotia reported that its Global Banking and Markets division offers a wide range of products in the U.S., including capital markets products and services, such as precious and base metals through ScotiaMocatta.

68. The Bank of Nova Scotia is a registered Swaps Dealer with the National Futures Association and regulated by the CFTC. It enters into derivative contracts for trading purposes, as well as to manage its risk exposures, which trading activities are undertaken for customers of The Bank of Nova Scotia and for The Bank of Nova Scotia.

69. The Bank of Nova Scotia participates in a number of payment, clearing and settlement systems in the U.S., including the Federal Reserve Wire Network, the Clearing House Interbank Payments System, the National Securities Clearing Corporation, the Fixed Income Clearing Corporation, the Depository Trust & Clearing Corporation, the Chicago Mercantile Exchange and the Bank of New York Mellon. The Bank of Nova Scotia conducts a material number or value amount transaction on the Chicago Mercantile Exchange and with the Bank of New York Mellon.

70. Defendant Scotia Capital (USA) Inc. is a New York corporation and registered broker and dealer in securities with the U.S. Securities and Exchange Commission, and member of the Financial Industry Regulatory Authority and New York Stock Exchange, with its principal place of business located at 1 Liberty Plaza, New York, NY 10006. Scotia Capital (USA) Inc. is a wholly owned subsidiary of Scotia Capital Inc., which is a wholly owned subsidiary of The Bank of Nova Scotia.

71. Defendant Scotiabanc Inc. is a Delaware corporation with its principal place of business located at 711 Louisiana Street, Suite 1400, Houston, Texas 77002. Scotiabanc Inc. is a wholly owned subsidiary of Defendant Scotia Holdings (US) Inc.

72. Defendant Scotia Holdings (US) Inc. is a Delaware corporation with its principal place of business located at 600 Peachtree Street NE, Atlanta, GA 30308-2219. Scotia Holdings (US) Inc. is a wholly owned subsidiary of BNS Investments Inc. The sole common shareholder of BNS Investments Inc. is The Bank of Nova Scotia and the sole preferred shareholder is Scotia Ventures Limited, which is a wholly owned subsidiary of The Bank of Nova Scotia.

73. Defendant The Bank Of Nova Scotia Trust Company Of New York is trust company regulated by the New York State Department of Financial Services and the Federal Reserve Bank of New York and a subsidiary of Scotia Holdings (US) Inc., with its principal place of business located at One Liberty Plaza, 165 Broadway, 26<sup>th</sup> Floor, New York, NY 10006.

74. Defendants The Bank of Nova Scotia, Scotiabanc Inc., Scotia Holdings (US) Inc., Scotia Capital (USA) Inc., and The Bank of Nova Scotia Trust Company of New York are collectively referred to herein as “Scotiabank.”

75. The Bank of Nova Scotia was a member of London Silver Fixing Ltd. during the entire Class Period until August 14, 2014 and the unlawful combination and conspiracy alleged herein, from which, to Plaintiffs’ knowledge, it has not effectively withdrawn.

## **5. UBS Defendants**

76. Defendant UBS AG (“UBS”) is a corporation organized under the laws of Switzerland with its principal place of business in Zurich, Switzerland. It has operations in over 50 countries, including in the United States. Throughout the Class Period, UBS was the third most active market maker in the silver spot market.

77. UBS AG's 2013 U.S. Resolution Plan describes the Investment Bank division of UBS AG, which contains three Core Business Lines. The Investment Bank is the largest division by owned assets, accounting for 53% of the consolidated total for UBS AG. One of the three Core Business Lines is the "Investor Client Services Foreign Exchange" ("ICS FX") which is described as follows: "ICS FX provides a full range of G10 and emerging markets currency and **precious metals services globally**. Through ICS FX, UBS is a market-maker in the professional spot, forwards and options markets. ICS FX also provides clients trading, investing and **hedging across the spectrum of gold, silver, platinum and palladium related offerings**." The 2013 UBS U.S. Resolution Plans also describes main products and underlyings that the UBS Group uses as "**an established precious metals ability** in both flow and non-vanilla OTC products incorporating both physical and non-physical trading... The vanilla OTCs are in forwards, swaps and options. The non-vanilla OTC business relates to cash-settled forwards similar in nature to nondeliverable forwards, meaning there is no physical delivery of the underlying."

78. UBS AG was required to designate its "Material Entities" in its Resolution Plan, which are significant to the activities of a "critical operation or core business line" affecting the United States. The regulations define "Critical Operations" and those operations of the covered company the failure or discontinuance of which "would pose a threat to the financial stability of the United States." UBS AG designated the following Material Entities in the U.S.: UBS AG New York WM Branch; UBS AG London Branch; UBS AG Stamford Branch; UBS Bank USA; UBS Financial Services Inc.; UBS Global Asset Management (Americas) Inc.; UBS O'Connor LLC; UBS Realty Investors LLC; UBS Securities LLC; and UBS Services LLC.

79. UBS AG was a Non-Clearing Member Firm in both the NYMEX and COMEX during at least part of the Class Period.

80. UBS AG was registered as a swap dealer in the U.S. at the end of 2012 and is regulated by the CFTC.

81. Subsidiaries UBS Securities LLC and UBS Financial Services Inc. and other U.S.-registered broker-dealer entities are subject to the regulations of the Securities Exchange Commission, the Financial Industry Regulatory Authority, the New York Stock Exchange, the Municipal Securities Rulemaking Board, the U.S. Department of the Treasury, the CFTC and other exchanges in the U.S.

82. In December 2014, pursuant to changes in its legal structure intended to respond to evolving industry-wide “too-big-to-fail” requirements, UBS Group AG (previously a wholly owned subsidiary of UBS AG) became the publicly-traded holding company for UBS AG and its subsidiaries. UBS Group AG shares will be listed on the SIX Swiss Exchange and the New York Stock Exchange. UBS AG announced on December 17, 2014 that its shares would be delisted in January 2015. As of December 17, 2014, over 96.68% of UBS AG stock was acquired by UBS Group AG. As a foreign private issuer, UBS AG and UBS Group AG are required to be in compliance with corporate governance standards applicable to foreign private issuers and jointly file an Annual Report on Form 20-F with the Securities Exchange Commission and submit its quarterly Financial Reporting to the SEC under Form 6-K.

83. UBS AG is subject to considerable regulation and supervision in the U.S. UBS AG maintains branches in Connecticut, Illinois, New York and Florida that are licensed by either the Office of the Comptroller of Currency (“OCC”) or the state banking authority of the state in which the branch is located. In addition, UBS AG maintains state and federally chartered trust



companies and other limited purpose banks regulated by the OCC or state regulators. The Federal Reserve Board exercises examination and regulatory authority of the state-licensed U.S. branches. UBS AG's subsidiary bank in Utah is insured by the FDIC. Because UBS AG operates U.S. branches, it is subject to oversight regulations by the Federal Reserve Board. On April 10, 2000, UBS was designated a "financial holding company" under the Bank Holding Company Act of 1956, which can engage in underwriting and dealing in securities.

84. Throughout the Class Period, Defendant UBS was the third most active market marker in the silver spot market. On November 12, 2014, the Swiss Financial Market Supervisory Authority ("FINMA") ordered UBS to pay 134 million Swiss francs (approximately \$139 million) to settle the foreign exchange and precious metals probe that began in 2008. Following the settlement, FINMA reported, "[t]his conduct was partly coordinated with other banks" and "electronic communications platforms played a key role." According to BLOOMBERG NEWS, FINMA said it found "serious misconduct" by UBS and a "clear attempt to manipulate fixes in the precious metal market," including Silver Fixing, during its investigation into precious metals and foreign exchange trading at UBS. FINMA's investigation found that UBS was "front running" precious metals trades, *i.e.*, using its advance knowledge of large transactions that would influence prices, to generate illegitimate profits in the silver market. FINMA Director Mark Branson said in a conference call, "The behavior patterns in precious metals were somewhat similar to the behavior patterns in foreign exchange."

85. While not a member of the Silver Fixing, UBS is accredited to participate in the new LBMA London Silver Price and as alleged further herein, participated in the unlawful combination and conspiracy with the Fixing Members.

**6. Jane Doe Defendants**

86. Jane Doe Defendants Nos. 1-100 are other entities or persons, including banks, interdealer brokers, cash brokers and other co-conspirators whose identities are currently unknown to Plaintiffs. The Jane Doe Defendants participated in, furthered, and/or combined, conspired, aided and abetted, or agreed with others to perform the unlawful acts alleged herein.

**7. Agents and Co-conspirators**

87. Other entities and individuals unknown to Plaintiffs at this time participated as co-conspirators and performed acts in furtherance of the conspiracy. Whenever reference is made to any act, deed, or transaction of any corporation or partnership, the allegation means that the corporation or partnership engaged in the act, deed or transaction by or through its officers, directors, agents, employees, representatives, parent, predecessors or successors-in-interest while they were actually engaged in the management, direction, control or transaction of business or affairs of the corporation or partnership.

**III. JURISDICTION, VENUE, AND COMMERCE**

88. This action arises under Section 22 of the Commodity Exchange Act, 7 U.S.C. § 25, Section 1 of the Sherman Antitrust Act, 15 U.S.C. § 1, and Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15 and 26, respectively.

89. This Court has federal question subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1337.

90. The Court may exercise supplemental jurisdiction pursuant to 28 U.S.C. § 1367 over Plaintiffs' claims under the laws of the several states.

91. Venue is proper in this District pursuant to 15 U.S.C. §§ 15(a) and 22, and 28 U.S.C. § 1391(b), (c) and (d), because during the Class Period, Defendants resided, transacted

business, were found, or had agents in this District, and a substantial portion of the alleged activity affected interstate trade and commerce in this District.

92. Defendants' conduct was within the flow of, was intended to, and did, in fact, have a substantial effect on the interstate commerce of the United States, including in this District.

93. During the Class Period, Defendants used the instrumentalities of interstate commerce, including interstate wires and the U.S. mail, to effectuate their illegal scheme.

94. Defendants' manipulation, conspiracy and conduct alleged herein was in U.S. import commerce and/or had direct, substantial and reasonably foreseeable effects on U.S. domestic commerce, and such effects give rise to Plaintiffs' claims, within the meaning of the Foreign Trade Antitrust Improvements Act.

95. Silver and silver financial instruments, like COMEX silver futures contracts, are commodities that trade in interstate commerce. Defendants' restraint of trade and intentional manipulation of silver and silver financial instrument prices had direct, substantial and foreseeable effects in the United States and on Plaintiffs and members of the Class. Billions of dollars of silver and silver financial instruments were traded in the United States during the Class Period. Defendants, as Fixing Members and sophisticated market participants, knew the results of the Silver Fix are (and were during the Class Period) disseminated in the United States, and are (and were during the Class Period) used to price silver and silver financial instruments, including COMEX silver futures contracts. For these reasons, Defendants knew that manipulating the Silver Fix, would, and did, have direct, substantial and reasonably foreseeable effects in the United States, including on the prices of silver financial instruments such as COMEX silver futures contracts.

96. Defendants' conduct had a substantial effect on the intrastate commerce of each of the fifty United States and its territories.

97. This Court has personal jurisdiction over each Defendant, because each Defendant transacted business, maintained substantial contacts, is located and/or they or their coconspirators committed overt acts in furtherance of their illegal conspiracy, in the United States, including in this District. The scheme was directed at, and had the intended effect of, causing injury to persons residing in, located in, or doing business in this District.

98. The Court has quasi in-rem jurisdiction over at least certain of the Defendants by virtue of their substantial physical assets located in New York, including caches of COMEX-registered silver bullion held in vaults in New York by at least HSBC and Scotiabank.

#### **IV. FIXING MEMBER DEFENDANTS SET THE GLOBAL BENCHMARK PRICE OF SILVER DURING THE CLASS PERIOD**

99. Prior to and during the Class Period, silver prices were set each business day by the concerted action of the Fixing Members, through an "old-fashioned and opaque,"<sup>25</sup> process called the Silver Fix. "The price fixings [we]re then used to determine prices worldwide."<sup>26</sup>

100. The Silver Fix "was born in the late 19th century when a handful of London bullion dealers agreed to meet daily under a cloud of cigar smoke to set the price for the 'devil's

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<sup>25</sup> *London's silver price fix dies after nearly 120 years*, THE FINANCIAL TIMES (May 14, 2014), <http://www.ft.com/intl/cms/s/0/db3188b8-db46-11e3-94ad-00144feabdc0.html?siteedition=intl#axzz38yxp1nAQ>.

<sup>26</sup> *US regulator considering an inquiry into London's gold and silver markets to check if prices are open to manipulation*, THE GUARDIAN (Mar. 13, 2013), <http://www.theguardian.com/business/2013/mar/13/london-financial-sector-gold-market/print>.

metal.”<sup>27</sup> The original members of the Silver Fixing in 1897 were: (i) Mocatta & Goldsmid; (ii) Sharps & Wilkins; (iii) Pixley & Abell; and (iv) Samuel Montagu & Co.

101. Until August 14, 2014, this “venerable City of London institution”<sup>28</sup> was orchestrated by Defendant London Silver Market Fixing, Ltd. Each business day the three Fixing Members—Defendants Deutsche Bank, HSBC, and Bank of Nova Scotia met on a secure conference call at 12:00 pm London Time to fix the price of physical silver. The Silver Fix, which typically took less than 10 minutes, was conducted as a “Walrasian” or simultaneous auction led by one of the Silver Fix Members who was designated as the “Chairman.” The Chairman position rotated among the Silver Fix panel members each year.

102. The Silver Fix ostensibly started with the Chairman’s determination of what was considered to be the U.S. Dollar “spot price” or current market price of silver in the London market. This was the opening price for the auction. The Fixing Members would then begin trading at the opening price. Each Fixing Member examined its order book, which contained orders from clients’ brokerage accounts along with proprietary orders from that Silver Fix panel member’s own trading desk. Based on those orders, each of the Fixing Members would then declare how many bars of silver (around 1,000 troy ounces each) they would be willing to buy or sell at the opening price in 50 bar increments.

103. After each participant placed their orders, the transactions were netted against each other. If the amount of buying interest was equal to the amount of selling interest the Silver

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<sup>27</sup> *London’s silver price fix dies after nearly 120 years*, THE FINANCIAL TIMES (May 14, 2014), <http://www.ft.com/intl/cms/s/0/db3188b8-db46-11e3-94ad-00144feabdc0.html?siteedition=intl#axzz38yxp1nAQ>.

<sup>28</sup> *What’s The London Silver Fix, And Why’s It Going Away?* THE WALL STREET JOURNAL (May 14, 2014), <http://blogs.wsj.com/moneybeat/2014/05/14/whats-the-london-silver-fix-and-whys-it-going-away/>.

Fix was complete. Otherwise, the Chairman would adjust the price up or down and the process would be repeated until the total amount of silver bought was within 300 bars of the total amount sold. For example, if at the opening price the Fixing Members expressed interest in buying a total of 1000 bars of silver but only 300 bars were offered for sale, the Chairman would have progressively raised the price, inducing the sellers to offer more silver, until the difference between the buyers and sellers was 300 bars or less.

104. If for some reason this 300 bar threshold could not be reached, the Chairman could unilaterally fix the price of silver and the Fixing Members would divide the excess supply or demand pro-rata among themselves. For example, if there were one buyer and two sellers and the one buyer was willing to purchase 300 bars more than what was being offered, the buyer would have reduced its buying interest by 100 bars and each of the sellers would increase their selling interest by 100 bars, collectively absorbing the 300 bar difference.

105. Once this “price-setting ritual”<sup>29</sup> was completed, the final price was published to the market. THE WALL STREET JOURNAL published a schematic of the Silver Fix in May 2014.<sup>30</sup>

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<sup>29</sup> *Century old London silver fixing firm closes shop*, RESOURCE INVESTOR (May 14, 2014), <http://www.resourceinvestor.com/2014/05/14/century-old-london-silver-fixing-firm-closes-shop?ref=hp>.

<sup>30</sup> *Curtain to Fall on London's Historic Silver Benchmark*, THE WALL STREET JOURNAL (May 14, 2014), <http://online.wsj.com/articles/SB10001424052702304908304579561202115402582>.



106. The importance of the Silver Fix cannot be overstated. Investors and silver market participants throughout the world used the result of the Silver Fix to price billions of dollars in physical silver and silver financial instruments, including COMEX silver futures contracts, each trading day. With the value of so many transactions linked to the Silver Fix, even small changes in the Silver Fix resulted in millions of dollars in gains or losses for silver market participants, including COMEX silver futures traders.

107. Despite the importance of the Silver Fix and its impact on the silver market as a whole, the entire process was conducted in secrecy. The daily conference calls were completely private. To Plaintiffs' knowledge, no records of what was said on the daily conference calls have been published and there was no active regulatory oversight of the Silver Fix. No one was allowed to observe the auction process or to verify the price information submitted during the auction. This extreme level of secrecy created an environment ripe for manipulation.

108. Defendants had a strong financial incentive to use the secretive Silver Fix process to their advantage. Just as there was no regulatory oversight of the Silver Fix, there were no restrictions on the Fixing Member Defendants' contemporaneous silver trading activity. Even

though the Fixing Members were responsible for fixing the market price of physical silver for the entire world, they were allowed to trade both physical silver and silver financial instruments freely—before, during, and after the Silver Fix. With complete control over the price of silver, the Fixing Members and their co-conspirators had a strong financial incentive to establish positions in both physical silver and silver financial instruments prior to the public release of Silver Fix results that allowed them to reap large illegitimate profits, which, Plaintiffs allege, they in fact did.

## **V. THE SILVER FIX SETS THE PRICE OF PHYSICAL SILVER AND DIRECTLY IMPACTS PRICES FOR MULTIPLE SILVER INVESTMENTS**

109. The “London silver fix is a global benchmark that is used by everyone from jewelers to miners to price their deals.”<sup>31</sup> THE WALL STREET JOURNAL reports, for example, that the Silver Fix “plays a crucial role in the roughly \$30 billion a year global trade in silver. It affects the price of jewelry, helps determine the value of numerous silver investments, and impacts the earnings of mining companies that sell raw material to metals refiners.”<sup>32</sup> Central banks also use the fix as a benchmark price for buying and selling silver for their reserves.

### **A. Physical Silver**

110. Physical silver is traded “over-the-counter” (“OTC”) in agreements between private parties. Because there is no centralized OTC market, the price of silver in these transactions is determined by reference to the Silver Fix, which throughout the Class Period was set by the Fixing Members.

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<sup>31</sup> *Curtain to fall on London’s historic silver benchmark*, MARKETWATCH (May 14, 2014), <http://www.marketwatch.com/story/curtain-to-fall-on-londons-historic-silver-benchmark-2014-05-14>.

<sup>32</sup> *Curtain to Fall on London’s Historic Silver Benchmark*, THE WALL STREET JOURNAL (May 14, 2014), <http://online.wsj.com/articles/SB10001424052702304908304579561202115402582>.



111. There are a variety of ways that physical silver is traded. Outside of the Silver Fix, which is itself an auction for 1000-ounce silver bars, investors buy and sell silver bars, coins, and “rounds,” coin sized pieces of silver with no face value, of various sizes. Regardless of the product purchased or its weight, the price of physical silver is always based on the “spot” or current market price of silver as set by the Silver Fix.<sup>33</sup> That physical silver can be traded in various amounts makes the market accessible to not only large bullion banks, like the Defendants, but also to smaller investors, including Class Members. According to Scotiabank, “For investment diversification, precious metals bullion is an alternative asset to any investment strategy.”<sup>34</sup>

112. Physical silver may be held directly by an investor and stored, for example, in a safe deposit box, or kept with a bullion bank, like Defendants Deutsche Bank, HSBC, Scotiabank or UBS, who acts as a custodian for the account holder. Silver stored with a bullion bank is kept in either an “allocated” or “unallocated” account. An allocated account gives the account holder an entitlement a specific, designated silver stock, which is segregated, and for which the account holder is provided a list of bar numbers, weights and assays of each bar. An unallocated account gives general entitlement to silver from the bank’s stock but specific bars or coins are not set aside or assigned to the account holder. In both cases, because the bank holds the silver, ownership is typically represented by a certificates, such as silver certificates sold by Scotiabank,

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<sup>33</sup> For example, the prices of silver bars and coins traded on the American Precious Metals Exchange are equal to the spot price of silver plus a premium, which can represent the cost of production as well as the collectable value of some rare coins. *See First Time Buyers FAQs*, APMEX, <http://www.apmex.com/first-time-buyer>.

<sup>34</sup> Scotiabank website, at <http://www.scotiamocatta.com/products/bullion.htm>.

which “may look and feel like paper, but they’re every bit as valuable as the precious metals they represent,” and convertible to silver bullion.<sup>35</sup>

## **B. Silver Financial Instruments**

113. The Silver Fix directly impacts the prices of numerous financial instruments traded on exchanges, such as futures and options contracts, and in over-the-counter markets, such as swaps and forwards. In the words of THE ECONOMIST, “Commodity prices are not just for buyers and sellers of the physical stuff. They are also the basis of derivative markets—futures contracts, options, and combinations of these and other financial instruments—which can be far larger. A twitch in the ‘benchmark’ price can mean big shifts in the value of derivatives, and profits for the prescient.”<sup>36</sup>

114. For instance, silver futures and options contracts are traded on the COMEX, short for Commodity Exchange, Inc., which is a division of the New York Mercantile Exchange. COMEX is a Designated Contract Market pursuant to Section 5 of the CEA, 7 U.S.C. § 7. COMEX specifies the terms of trading for silver futures and options contracts, including the trading units, price quotation, trading hours, trading months, minimum and maximum price fluctuations and margin requirements. Silver futures and options contracts were also traded on the NYSE LIFFE exchange<sup>37</sup> and on the CBOT<sup>38</sup> during the Class Period. These contracts function in exactly the same way as COMEX silver futures contracts and options.

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<sup>35</sup> Scotiabank website, at <http://www.scotiamocatta.com/products/certificates.htm>.

<sup>36</sup> *In a Fix, Mr. Bond: New Concerns Surround the Way the World Gold Price Is Set*, THE ECONOMIST (Mar. 8, 2014), <http://www.economist.com/news/finance-and-economics/21598676-new-concerns-surround-way-world-gold-price-set-fix-mr-bond>.

<sup>37</sup> NYSE LIFFE exchange silver futures and options are now traded within the United States on the Intercontinental Exchange (“ICE”). See <https://www.theice.com/products/Futures-Options/Foreign-Exchange#/products/31500923/Mini-Silver-Future>; ICE website, at

115. Because a futures contract represents a bilateral agreement between parties, there are always two sides or positions for the related transaction. These positions are equivalent to that of buyer and seller. The person or entity that is buying the futures contract has what is called a “long” position. The one selling the contract has a “short” position.

116. Those in the long and short positions have different roles as the futures contract nears expiration, or the last trading day for that specific contract. Longs (as the buyers of the contract) are obligated to take delivery of the underlying commodity, in this case silver, while shorts (as the sellers) are required to make delivery of the amount of silver represented by their contracts.

117. This process of exchanging metals between buyer and seller is called “settlement.” All futures contracts are settled following their expiration, however, in most cases this does not result in an exchange of the physical commodity. Market participants have the option to offset or “financially settle” their futures positions. In financial settlement, instead of taking or making delivery of the physical commodity, investors in either the long or short position can offset their obligations with contracts for an equal but opposite position. For example, as a purchaser of a silver futures contract who is long can settle their obligation to take delivery of physical silver by selling an equal and offsetting number of futures contracts.

118. The difference between the two contract prices, for example the difference between the price at which the initial contract was purchased and the price at which the later offsetting contract was sold, is the profit or loss on that transaction. Investors with long positions, as buyers of the underlying commodity, generally benefit as the price of the

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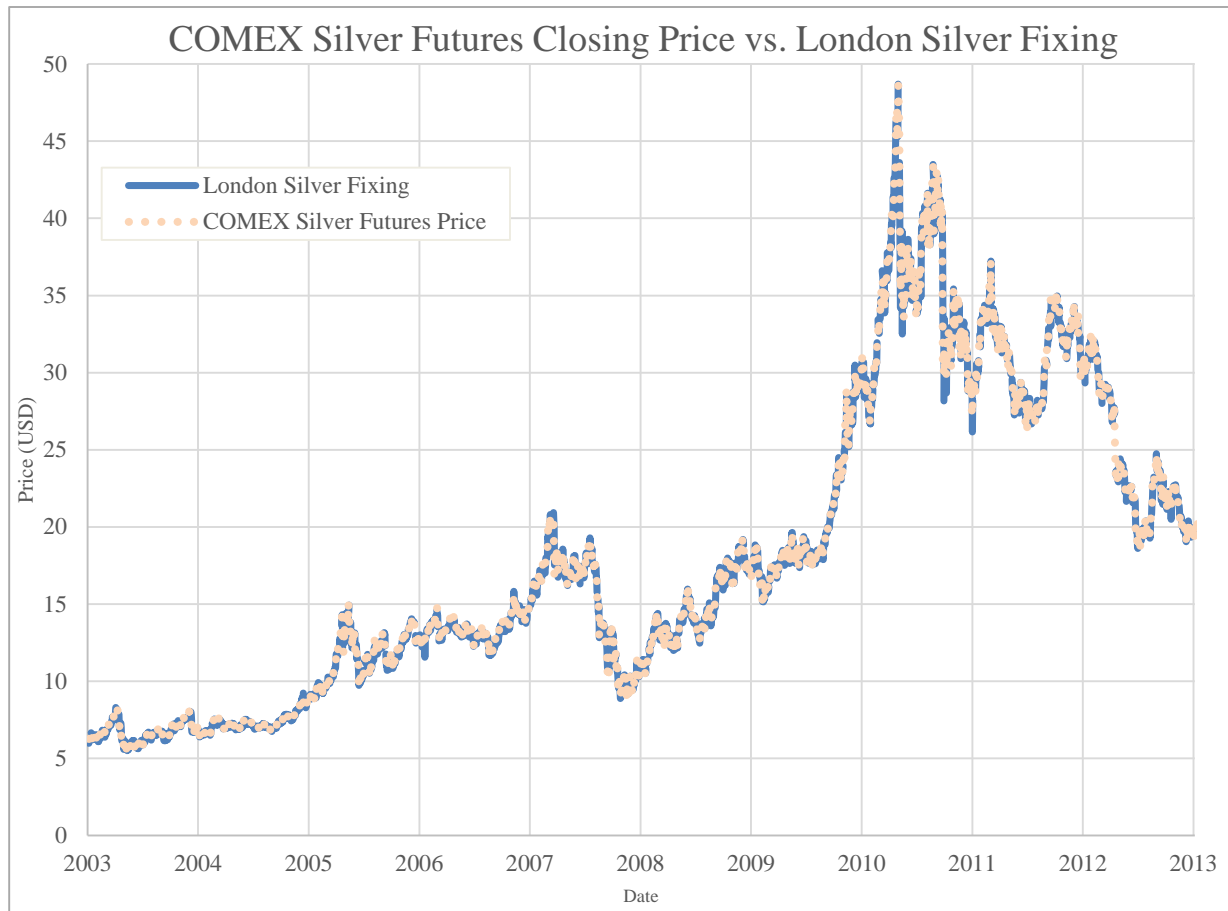
<https://www.theice.com/products/Futures-Options/Foreign-Exchange#/products/31500927/Options-on-1000oz-Mini-Silver-Future>.

<sup>38</sup> *An Introduction to Trading CBOT Electronic Gold and Silver*, CHICAGO BOARD OF TRADE, [http://insigniafutures.com/Docs/CBOT\\_preciousMetals.pdf](http://insigniafutures.com/Docs/CBOT_preciousMetals.pdf).

commodity rises since they are able to sell an offsetting short contract at a higher price. Those with short positions, as sellers of the underlying commodity, generally benefit as the price of the commodity decreases since they are able to buy an offsetting long contract at a lower price.

119. Similarly, there are two types of options on exchange traded silver futures contracts, commonly known as “calls” and “puts.” A call option gives the holder the right, but not the obligation, to buy a silver futures contract at a specified price, known as the “strike price,” prior to some date in the future, at which point the option to purchase that contract “expires.” Conversely, a put option gives the holder the right, but not the obligation, to sell a silver futures contract at the strike price prior to the expiration date.

120. Figure 1 (below) displays the daily closing price of COMEX silver futures contracts and the results of the Silver Fixing from January 2004 through December 2013. As displayed in Figure 1, over this 10 year period, the price of COMEX silver futures contracts, represented by the dotted line, tracks the results of the Silver Fix.

**FIGURE 1**

121. Plaintiffs confirmed the relationship between COMEX silver futures contracts and the Silver Fixing shown in Figure 1 by using a regression analysis. A regression analysis is a statistical tool that is used to evaluate the relationship between two variables. Comparing the daily closing prices of front month COMEX silver futures, *i.e.*, the contract closest to expiration, to the results of that day's Silver Fix, showed a statistically significant relationship between the price of COMEX silver futures contracts and the results of the Silver Fix. The regression analysis produced an  $R^2$  value of .9985, indicating that 99.85% of the variation in the price of COMEX silver futures contracts over the 10 year period displayed in Figure 1 was explained by the results of the Silver Fix.

122. Additionally, as the result of a Freedom of Information Act (“FOIA”) request made to the CFTC, Class Counsel received information demonstrating that commercial silver traders use the prices of COMEX silver futures contracts to calculate the spot market price of silver, which is listed on Bloomberg under the ticker symbol “XAG:”

**January 30, 2009:**

Trader 1: need to know which comex futures we will use today to calculate spots for  
XAU XAG XPT XPD

Trader 2: well gold comex went out today at 928.4

Trader 2: silver went out at 12.565

123. Defendants, as traders of both physical silver and silver financial instruments, silver market makers, and Fixing Members, understood the relationship between the price of silver financial instruments, like COMEX silver futures contracts, and the Silver Fix and knew that a manipulation of the Silver Fix would impact both the price of silver and the prices of other silver financial instruments.

124. Various financial instruments, the prices of which were impacted by the Silver Fix, also traded in over-the-counter markets during the Class Period. These financial instruments include commodity swaps and forwards. “A commodity swap is a cash-settled agreement in which two parties agree to a series of cash flows based on an agreed (notional) quantity of a commodity. One party typically pays a fixed price for the notional quantity and the other a floating price. The major distinction between a forward and a swap is that a forward is an agreement on one exchange, while a swap is an agreement on a series of exchanges.”<sup>39</sup> Silver serves as an underlying commodity in such agreements. International Swaps and Derivatives

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<sup>39</sup> *Product Descriptions and Frequently Asked Questions*, ISDA, <http://www.isda.org/educat/faqs.html#34>.

Association (“ISDA”), the standard setting body for the OTC derivatives industry specifically defined “SILVER-FIX” as the price set by the Silver Fix. Upon the announcement that the Silver Fix was ending, ISDA announced that its silver benchmark also would be changing for the fix.<sup>40</sup> Silver commodity swaps are now tied to the LBMA London Silver Price.<sup>41</sup> An outright forward is an agreement between parties to buy or sell a certain quantity of a commodity at a specified price on a future date. Forwards are identical to COMEX silver futures contracts, except that they allow the parties to determine the amount of silver to be purchased or sold and the settlement date.

**VI. DEFENDANTS EXPLOITED AND ABUSED THEIR ADVANTAGEOUS POSITION AS SILVER FIX PANEL MEMBERS BY ENGAGING IN MANIPULATIVE AND COLLUSIVE CONDUCT TO CAUSE ARTIFICIAL SILVER PRICES DURING THE CLASS PERIOD**

125. The private nature of the Silver Fix creates an environment that is highly susceptible to manipulation and collusion. First, the Silver Fix is a direct exchange of intended or future pricing information among horizontal competitors. Defendants, as some of the world’s largest banks, compete across a wide range of financial service markets, including the market for silver and silver financial instruments. Defendants compete against each other both for customers and in their proprietary trading of silver. Defendants’ private communications during the Silver Fix provided the opportunity to signal their pricing desires to their competitors in real time, creating an environment that is highly susceptible to manipulation.

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<sup>40</sup> *Explanatory Statement – winding down of London Silver Fix*, ISDA, <http://assets.isda.org/media/8551c34a/34ac6e65.pdf/>.

<sup>41</sup> *ISDA publishes Bilateral Form of Amendment Agreement for Certain Silver Transactions*, ISDA, <http://www2.isda.org/news/isda-publishes-bilateral-form-of-amendment-agreement-for-certain-silver-transactions>.

126. Second, this exchange of pricing information occurs among a very small group of competitors, *i.e.*, Defendants Deutsche Bank, HSBC, and Bank of Nova Scotia, each of which has a large market share in the market for silver and silver financial instruments. In contrast to other benchmarks, which are based on data from the broader market, the Silver Fixing entrusts the global price of silver to a small group of competitors, making it easy for them to influence prices.

127. Third, the Silver Fixing occurs at very high frequency, once each day at noon London time. The frequency of this meeting gives the Fixing Members and their co-conspirators an informational advantage over uninformed market participants on at least every day the Fix occurs. In this situation, collusion becomes a rational strategy for increasing profits at the expense of uninformed market participants that do not have knowledge of the pricing information exchanged during the Silver Fixing or an opportunity to participate in fixing price of silver.

128. Fourth, the Silver Fixing is private. The daily conference call between Fixing Members takes place on a secure line and is completely secret. There are no outside observers, and to Plaintiffs' knowledge no recordings of the Silver Fixing have ever been released. Additionally, no regulatory body oversees the auction process or verifies the data submitted by the Fixing Members during the Silver Fixing. In truth, no one except for the Silver Fixing Members knows exactly what occurs on the conference call. As a result of this secretive structure, the Fixing Members have access to non-public information about changes in the price of silver that is unavailable to the rest of the silver market.

129. Lastly, the Defendants have a direct financial interest in the outcome of the Silver Fixing. Defendants are all traders of silver and silver financial instruments. This creates a



financial incentive for Defendants to manipulate the Silver Fixing in a particular direction in order to financially benefit their proprietary trading positions.

130. These features, including the (i) high strategic importance of the information exchanged during the Silver Fix; (ii) real time data rather than historical nature of that data; (iii) the fact that the Silver Fix involves a private rather than public exchange of information; (iv) the use of individual transaction data (bids, asks, volumes) rather than aggregate market data; (v) the very high frequency exchanges (once or twice a day); (vi) the direct conflicts of interest between the Fixing Members and the rest of the market, which relies on the Silver Fix ; and (vii) a long history of these exchanges throughout many years , are all red flags indicative of collusion. *See, e.g.,* 2000 U.S. Department of Justice and Federal Trade Commission Guidelines for Collaborations Among Competitors (2000); EC Guidelines (2011); Central and South American Guidelines (2013).

131. With respect to the silver market, all of the following red flags also apply: (i) a very small number of parties involved with significant market power; (ii) interlocking directorates creating additional conflicts of interest; (iii) lack of market transparency in OTC trading enhancing the value of anticompetitive exchanging information; (iv) the ability to reduce market complexity and unpredictability through anticompetitive information exchanges; (v) multimarket contact among submitters enhancing the stability of collusion; (vi) barriers to entry enhancing market power and the stability of collusion; (vii) low benefits to cheating on a collusive agreement enhancing the stability of collusion; and (viii) repeated similar behavior found in many similar benchmark settings increasing the likelihood that collusion may also be occurring.

132. The veneer of competition projected by the Silver Fix auction allowed Defendants to operate without detection. In addition to purportedly being a competitive process, no public records of the auctions were kept other than the results of the Fix, meaning that Defendants' representations that the Silver Fixing was a competitive process played an outsized role in the success of the conspiracy.

**A. Defendants Abused their Positions As Silver Fix Panel Members By Manipulating the Silver Fix to Levels That Did Not Reflect the Legitimate Supply and Demand for Silver**

133. The Fixing Members, who were responsible for establishing the spot price of silver worldwide, had a duty to conduct the Silver Fix in such a way that the resulting price of silver reflected legitimate supply and demand fundamentals. Instead, during the Class Period, the Fixing Members breached their duties and responsibilities as Silver Fix panel members by, *inter alia*, agreeing to submit false pricing information not reflective of legitimate supply and demand fundamentals during the Silver Fix to manipulate the price of silver and silver financial instruments to artificial levels that benefitted their trading positions.

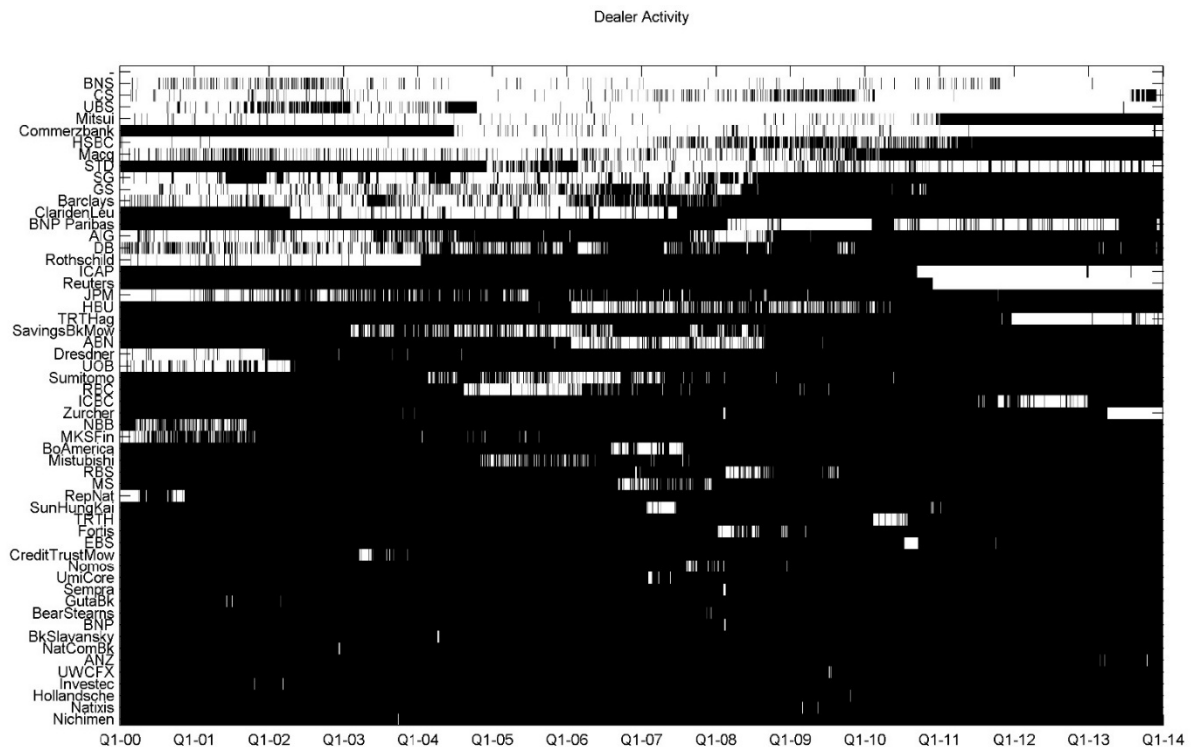
**B. Defendants Used Their Advance Knowledge of the Silver Fixing Results to Establish Positions in Silver Financial Instruments During the Silver Fix Before the Results Were Released to the Public**

134. Defendants unlawfully used their advance, inside knowledge of the Silver Fix to establish positions in the silver market, including positions in silver futures and options, which would increase in value once the results of the Silver Fix were released to the public.

135. In a scheme akin to front running, the Fixing Members, with complete and unaudited control over the results of the Silver Fix, colluded with each other about where to fix the price of silver, and then either directly or through contact with their trading desks, establish positions in the silver market that would financially benefit from where they knew the price of silver was going to be fixed following the public release of the Silver Fix to the general market.

For example, if Defendants decided that the Silver Fix price was going to be higher than currently reflected in the price of COMEX silver futures contracts, Defendants would establish long COMEX silver futures positions that would increase in value once the Silver Fixing results were released to the public and the price of silver increased.

136. Defendants are among the most active “market makers,” or dealers that both buy and sell silver on a regular and continuous basis at a publicly quoted price, in the spot market for physical silver. Figure 2 displays the activity of the top 65 market makers in the silver spot market, and is based on more than 17 million public spot market quotes, between January 1, 2000, and December 31, 2013. The left vertical axis indicates the name of each market participant, while the white areas demonstrate times when that institution was actively engaged in quoting silver prices in the spot market. Figure 2 shows that the Defendants HSBC, Bank of



**FIGURE 2**

Nova Scotia (identified as “BNS”), Deutsche Bank (identified as “DB”), and UBS, are among the top 20 silver spot market participants.

137. In the same way that Defendants could take advantage of their advance knowledge of the Silver Fix results by establishing positions in silver financial instruments that would increase in value once the Silver Fix was released to the public, they could also use this information to their advantage in the silver spot market. As market makers, the Defendants buy and sell silver hoping to make a profit on the difference between the two prices, known as the “bid-ask spread.” Knowing the direction of the Silver Fix in advance benefits Defendants by allowing them to adjust their price quotations, for example, buying silver at lower price and selling at a higher price, generating larger profits from their spot market transactions.

138. Advance knowledge of the Silver Fix also allows the Defendants to adjust their spot market quotes to influence the market price of silver, moving it in a specific direction to financially benefit their silver positions. In one example of this kind of manipulative conduct, identified by Plaintiffs’ experts, Defendants Deutsche and UBS systematically quoted silver prices significantly below the quotes of other market participants leading up to and during the Silver Fix, influencing the overall price trend in the spot silver market. *See* Part 10.B, *infra*.

139. This manipulative conduct rendered Defendants’ positions in both silver and silver financial instruments, including those initiated and liquidated in or around the Silver Fix, an illegitimate part of the supply-demand equation for the prices of all silver and silver financial instruments, including COMEX silver futures contracts.<sup>42</sup>

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<sup>42</sup> *See Matter of Indiana Farm Bureau Coop. Ass’n, Inc.*, CFTC Dkt. No. 75-14, 1982 WL 30249, at \*39 (CFTC Dec. 17, 1982) (explaining that if a price is affected by a factor that is not legitimate, for example, trading that violates contract market rules or laws, then “the resulting price is necessarily artificial”).

## VII. GOVERNMENT ENFORCERS HAVE BEEN INVESTIGATING THE SILVER FIX

### A. Government Enforcers are Aware that the Silver Market is Open to Manipulation

140. U.S. and European authorities are investigating the Fix. In particular, the CFTC said last March that it had “started internal discussions on whether the daily setting of gold and silver benchmarks is open to manipulation.”<sup>43</sup> In February 2013, CFTC Commissioner Bart Chilton issued a statement to the International Roundtable on Financial Benchmarks, providing in part:

I’m pleased we are discussing the critically important topic of benchmarks. We’ve witnessed blatant and brazen monkeying with the marks. . . . the idea that pervasive manipulation, or attempted manipulation, is so widespread should make us all query the veracity of the other key marks. What about energy, swaps, the gold and **silver fixes in London** and the whole litany of “bors?” Why would they be any different in the minds of those that may have sought to push or pull rates? For me, this means every single mark needs to be reviewed, and potentially investigated.<sup>44</sup>

141. Commissioner Chilton followed up on these remarks: “Given what we have seen in Libor, we’d be foolish to assume that other benchmarks aren’t venues that deserve review.”<sup>45</sup>

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<sup>43</sup> *How London’s gold and silver price benchmarks are ‘fixed,’* REUTERS (Jan 17, 2014), <http://uk.reuters.com/assets/print?aid=UKBREA0G19J20140117>.

<sup>44</sup> *Statement of Commissioner Bart Chilton before the International Roundtable on Financial Benchmarks*, Washington, D.C. (February 26, 2013), <http://www.cftc.gov/PressRoom/SpeechesTestimony/chiltonstatement022613> (emphasis added).

<sup>45</sup> *CFTC’s Chilton Says ‘Foolish’ Not to Review Benchmark Pricing*, BLOOMBERG (Mar. 14, 2013), <http://www.bloomberg.com/news/2013-03-14/cftc-s-chilton-says-foolish-not-to-review-benchmark-pricing.html>.

The UK's Financial Conduct Authority has also been looking at precious metals as part of a broader review of financial benchmarks.”<sup>46</sup>

142. Dr. Elke König, the President of BaFin, the German Federal Financial Supervisory Authority, which is one European agency investigating, gave a speech on January 16, 2014, in which she remarked: “Markets depend on the trust of the wider public that they are performing and that they work honestly.”<sup>47</sup> The head of BaFin warned that “manipulation of the metals as well as the foreign exchange market was ‘particularly serious.’”<sup>48</sup>

143. “The benchmark setting process remains under scrutiny by regulators including London's Financial Conduct Authority.”<sup>49</sup> In particular, BaFin is reported to have raided and demanded documents from Deutsche Bank, “signal[ing] that BaFin now has greater concerns over the precious metals markets.”<sup>50</sup> The investigations led Deutsche Bank, which had been on the panel for twenty years, to withdraw from the Fix in January 2014,<sup>51</sup> for having “faced

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<sup>46</sup> *Gold price probe extended to Deutsche Bank*, THE FINANCIAL TIMES (Dec. 12, 2013), <http://www.ft.com/intl/cms/s/0/b386aa16-6358-11e3-886f-00144feabdc0.html?siteedition=uk#axzz3I2RldBII>.

<sup>47</sup> *How London's gold and silver price benchmarks are 'fixed,'* REUTERS (Jan 17, 2014), <http://uk.reuters.com/assets/print?aid=UKBREA0G19J20140117>.

<sup>48</sup> *Deutsche puts gold price fix role on sale*, THE FINANCIAL TIMES (Jan. 17, 2014), <http://www.ft.com/intl/cms/s/0/02f5a19c-7f97-11e3-b6a7-00144feabdc0.html?siteedition=uk#axzz3I2RldBII>.

<sup>49</sup> *Deutsche puts gold price fix role on sale*, THE FINANCIAL TIMES (Jan. 17, 2014), <http://www.ft.com/intl/cms/s/0/02f5a19c-7f97-11e3-b6a7-00144feabdc0.html?siteedition=uk#axzz3I2RldBII>.

<sup>50</sup> *Gold price probe extended to Deutsche Bank*, THE FINANCIAL TIMES (Dec. 12, 2013), <http://www.ft.com/intl/cms/s/0/b386aa16-6358-11e3-886f-00144feabdc0.html?siteedition=uk#axzz3I2RldBII>.

<sup>51</sup> *Deutsche resigns gold and silver price-fix seats*, FINANCIAL TIMES (April 29, 2014), <http://www.ft.com/intl/cms/s/0/f00383f2-cfb3-11e3-a2b7-00144feabdc0.html?siteedition=uk#axzz38yxp1nAQ>.

scrutiny from the German regulator, BaFin, over its participation in the London gold and silver benchmark setting process over suspicions that the process may have been subject to manipulation by the key players.”<sup>52</sup>

144. On November 9, 2014, THE FINANCIAL TIMES reported that UBS would settle allegations of misconduct in its gold and silver trading business, including the manipulation of silver prices, as part of a settlement with multiple financial regulatory agencies related to manipulative conduct in the foreign exchange (“forex”) market. While the two markets may seem unrelated, UBS’s precious metals and foreign exchange businesses are tightly integrated, using joint management and staff who work together and sit on the same floor with forex traders.

145. Prior to the news of these settlements, UBS had disclosed that it launched an internal probe of its precious metals business and pushed hard to speed up its internal precious metals probes to get ahead of rivals in securing immunity agreements.<sup>53</sup>

146. On November 12, 2014, the Swiss Financial Market Supervisory Authority (“FINMA”) ordered UBS to pay 134 million Swiss francs (approximately \$139 million) to settle allegations of misconduct arising from its foreign exchange and precious metals investigation. Following the settlement, FINMA reported, “[t]his conduct was partly coordinated with other banks” and “electronic communications platforms played a key role.” As a result of their findings, FINMA also ordered UBS to cap the variable compensation of UBS’s precious-metals staff to 200% of base salary for two years. According to BLOOMBERG NEWS, FINMA said it found ‘serious misconduct’ by UBS and a “clear attempt to manipulate fixes in the precious

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<sup>52</sup> *Deutsche puts gold price fix role on sale*, THE FINANCIAL TIMES (Jan. 17, 2014), <http://www.ft.com/intl/cms/s/0/02f5a19c-7f97-11e3-b6a7-00144feabdc0.html?siteedition=uk#axzz3I2RldBII>.

<sup>53</sup> *See UBS Probes Precious Metals as Hong Kong Reprimands Rate Trading*, BLOOMBERG (Mar. 14, 2014), available at <http://www.bloomberg.com/news/2014-03-14/ubs-probes-precious-metals-as-hong-kong-reprimands-rate-trading.html>.

metal market,” including Silver Fixing, during its investigation into precious metals and foreign exchange trading at UBS. FINMA reported that UBS was front running precious metals trades, *i.e.*, generating a profit by trading with advance knowledge about a transaction expected to influence prices. FINMA Director Mark Branson said in a conference call, “The behavior patterns in precious metals were somewhat similar to the behavior patterns in foreign exchange.”

**1. The CFTC Identified Several Dates With Aberrant Silver Prices During the Class Period**

147. In September 2008, the CFTC announced that it was investigating complaints of misconduct in the silver market.<sup>54</sup> These complaints were not specifically related to the Silver Fix, and instead focused on whether COMEX silver futures prices were being manipulated artificially lower, relative to the prices of “retail” silver products like silver coins, by banks that held a large open short position in COMEX futures contracts.<sup>55</sup>

148. The following information was produced to Class Counsel as a result of a FOIA request made to the CFTC. Among the documents produced was an Order for Commercial Items (“Work Order”), which identified the Expert Witness Services obtained in the CFTC’s earlier investigation. In the attached Amended Statement of Work, the CFTC identifies specific dates “of interest” for the Proposed Expert, FTI Consulting, Inc. (“FTI”) to target in its investigation of silver prices. These dates include: August 22, 2008, August 27, 2008, September 17, 2008, September 18, 2008, October 20, 2008, January 23, 2009, January 27, 2009, February 26, 2009, November 15, 2009, March 10, 2009 and March 10, 2010.

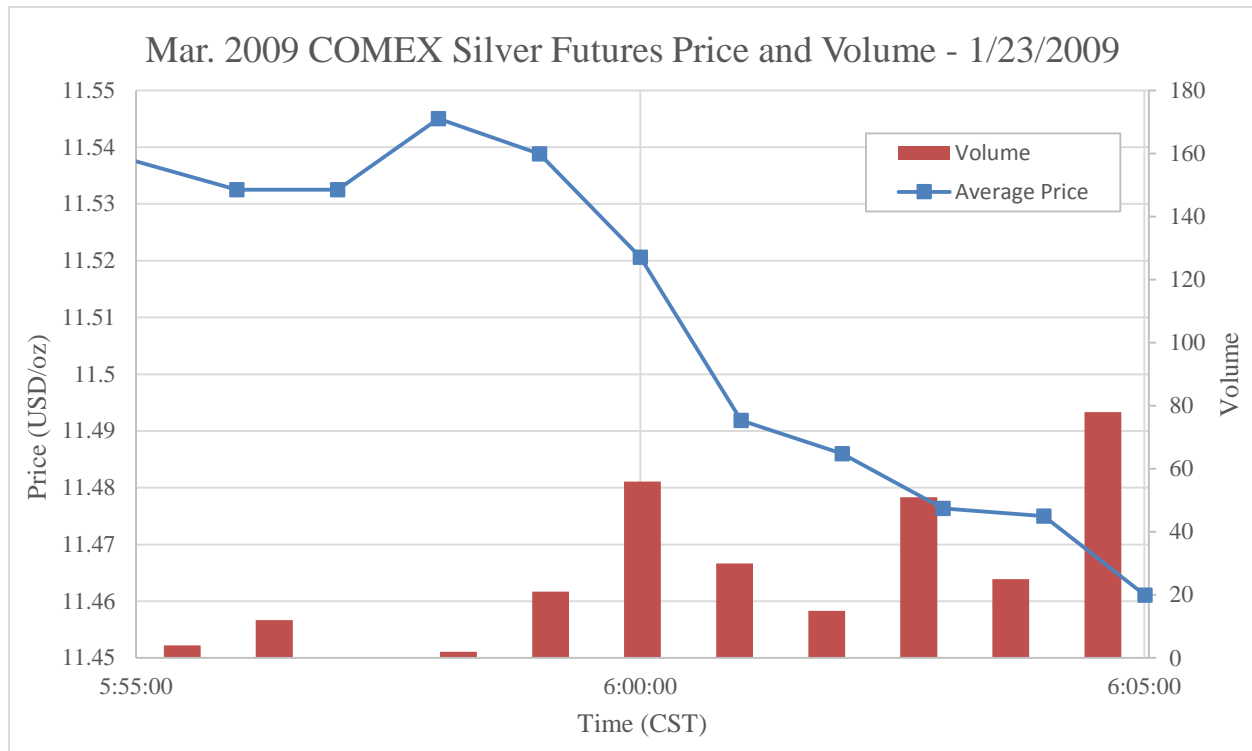
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<sup>54</sup> *CFTC’s 2008 Fiscal Year Enforcement Roundup*, U.S. COMMODITY FUTURES TRADING COMMISSION (Oct. 2, 2008), <http://www.cftc.gov/PressRoom/PressReleases/pr5562-08>.

<sup>55</sup> *CFTC Closes Investigation Concerning the Silver Market*, U.S. COMMODITY FUTURES TRADING COMMISSION (Sept. 25, 2013), <http://www.cftc.gov/PressRoom/PressReleases/pr6709-13>.



149. The Work Order authorizes FTI to reassess its “prior analysis of these dates in light of conversations by traders captured in an electronic communication and conduct an analysis of the Bank’s OTC transactions on these days to determine if there is any activities leading up to the [dates of interest] that could be viewed as disconnecting the futures prices from the forward prices.” In the Work Order, FTI is asked the following, “As for the 16 IM dates we would like FTI to look for the specific concentrated trading pattern you described to us earlier.” Certain dates identified by the CFTC were also identified by Plaintiffs’ proprietary data mining software which searched for dates exhibiting anomalous price and volume changes around the start of the Silver Fix.



**FIGURE 3**

150. For example, Figure 3 shows the average price and trading volume of the March 2009 COMEX silver futures contract during the five minutes before and after the start of the Silver Fixing at 6:00 A.M. Central Standard Time, on January 23, 2009. This chart demonstrates that in the minute leading up to and immediately after the start of the Silver Fix, the trading volume for the March 2009 COMEX silver futures contracts increases significantly while the price of the COMEX silver futures contract decreases.

151. The price drop identified in Figure 3 correctly predicted the direction of the Silver Fix, which was \$11.46 on January 23, 2009. As alleged herein, the specific pattern of market activity identified in Figure 3 is consistent with Plaintiffs' expert's analysis, and indicative of information about the results of the Silver Fix being "leaked" to the market while the Silver Fix is in progress. This information leakage is the product of trades being placed by informed

traders, like the Defendants, with knowledge of the Fix before the results are released to the general public.

**2. Commercial Silver Traders Are Aware of Manipulation in the Precious Metals Market**

152. Even commercial silver traders perceived that prices in the precious metals market were manipulated during the Class Period. The following instant messages were produced to Class Counsel as a result of a FOIA request made to the CFTC. The identity of the individual trader sending each message was redacted. In this conversation, among others, silver traders discuss their trading strategies in the precious metals market and the surprise that “technical analysis,” the forecasting of price direction based on historical market information, continues to work in a manipulated market:

**June 5, 2009:**

Trader: this is a video game

Trader: its all risk management and pattern recognition

Trader: prices i think,

Trader: are actually reflective of human patterns

Trader: as much as the market is manipulated

Trader: technical analysis never ceases to amaze me

153. In the excerpt from a conversation between two commercial silver traders below, the traders discuss how silver is “dangerous to trade” because liquidity in the market decreases substantially whenever the price decreases:

**November 8, 2004:**

Trader: I think for like silver and platinum and palladium you can get into them and then never be able to get out

Trader: gold usually has volume though

Trader: like silver especially

Trader: b/c it can be really liquid on the way up, and then not at all on the way

Trader: down

Trader: so dangerous to trade

Trader: silver trader here says silver has been making  
millionaires out of billionaires since 1971

154. These electronic communications are consistent with the proposition that the persistent downward manipulation of silver prices during the Class Period directly and proximately caused injury to class members by, *inter alia*, impacting the price at which they initiated and liquidated their positions in the market, as Defendants' understood that it was easier to manipulate the price of silver and silver financial instruments when the price decreased and the market was illiquid.

**B. Increasing Pressure to Expand Transparency Results in a Revamped Silver Fix**

155. In response to the public outcry, government investigations, economists and academics saying that the Silver Fix lacks sufficient regulation and is susceptible to manipulation, on August 2014, the Silver market became the first of the precious metals markets to ditch a daily "Fixing" procedure where dealers agree to a price over telephone. On August 14, 2014, the Silver Fix ritual was replaced with an electronic, auction-based mechanism to enhance confidence in the silver benchmark.

156. While losing the "unfortunate name," in favor of the "London Silver Price," and the "private teleconference," in favor of electronic trading, THE FINANCIAL TIMES reports that "anyone thinking there has been a complete change in the way the daily snapshot of the silver market is conducted would be mistaken. The new benchmark . . . keeps some of the main features of the silver fixing, in particular the auction-style process used to calculate the reference

price.”<sup>56</sup> Two of the other main features that continue are HSBC and Scotiabank, each of which is (or remains) on the London Silver Price panel.

### **VIII. THE DEMISE OF THE SILVER FIX**

157. After 117 years, the Silver Fix officially ended on August 14, 2014. A series of steps stemming largely from the global government investigations led to its demise.

#### **A. Under Government Investigation, Deutsche Bank Put its Seat on the Silver Fixing Panel Up for Sale**

158. In January 2014, Deutsche Bank abruptly announced that it was putting its seat on the panel up for sale, having “faced scrutiny from the German regulator, BaFin, over its participation in the London gold and silver benchmark setting process over suspicions that the process may have been subject to manipulation by the key players.”<sup>57</sup>

159. Deutsche “said it would continue to participate in price setting until it finds a buyer, but would resign its seat if it fails to do so.”<sup>58</sup> At the time, however, it seemed resignation would be unlikely as the sale was said to present “an opportunity for a new bank to join the elite

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<sup>56</sup> *New silver price is ‘improvement’ on fix*, THE FINANCIAL TIMES (July 16, 2014), <http://www.ft.com/intl/cms/s/0/4053ff04-0ccb-11e4-90fa-00144feabdc0.html#axzz38yxp1nAQ>.

<sup>57</sup> *Deutsche puts gold price fix role on sale*, THE FINANCIAL TIMES (Jan. 17, 2014), <http://www.ft.com/intl/cms/s/0/02f5a19c-7f97-11e3-b6a7-00144feabdc0.html?siteedition=uk#axzz3I2RldBIJ>.

<sup>58</sup> *Deutsche puts gold price fix role on sale*, THE FINANCIAL TIMES (Jan. 17, 2014), <http://www.ft.com/intl/cms/s/0/02f5a19c-7f97-11e3-b6a7-00144feabdc0.html?siteedition=uk#axzz3I2RldBIJ>.

club of price setters in one of the world's largest precious metals trading hubs.”<sup>59</sup> And “Deutsche said it had already begun talks with other banks to sell its role.”<sup>60</sup>

**B. Deutsche Was Unable to Sell What Should Have Been a Valuable Seat**

160. Deutsche Bank did try to sell its seat on the panel, but, tellingly, there were no takers.<sup>61</sup> “A source close to the German bank said it had tried to sell its positions but had been ‘unable to agree terms with any prospective buyers.’”<sup>62</sup>

**C. Deutsche Resigned Unable to Sell its Seat**

161. Having found no buyer, Deutsche announced its resignation.<sup>63</sup> The Silver Fix thus “was put on the fast track to extinction . . . leaving just two banks still taking part— Bank of Nova Scotia and HSBC Holdings PLC.”<sup>64</sup> THE FINANCIAL TIMES reported, “Deutsche’s

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<sup>59</sup> *Deutsche puts gold price fix role on sale*, THE FINANCIAL TIMES (Jan. 17, 2014), <http://www.ft.com/intl/cms/s/0/02f5a19c-7f97-11e3-b6a7-00144feabdc0.html?siteedition=uk#axzz3I2RldBII>.

<sup>60</sup> *Deutsche puts gold price fix role on sale*, THE FINANCIAL TIMES (Jan. 17, 2014), <http://www.ft.com/intl/cms/s/0/02f5a19c-7f97-11e3-b6a7-00144feabdc0.html?siteedition=uk#axzz3I2RldBII>.

<sup>61</sup> *CME and Thomson Reuters to set silver Benchmark*, FINANCIAL TIMES (July 11, 2014), <http://www.ft.com/intl/cms/s/0/7f838fc4-08d8-11e4-8d27-00144feab7de.html?siteedition=uk#axzz38yxp1nAQ>.

<sup>62</sup> *Deutsche resigns gold and silver price-fix seats*, THE FINANCIAL TIMES (April 29, 2014), <http://www.ft.com/intl/cms/s/0/f00383f2-cfb3-11e3-a2b7-00144feabdc0.html#axzz3I2RldBII>.

<sup>63</sup> *Deutsche resigns gold and silver price-fix seats*, THE FINANCIAL TIMES (April 29, 2014), <http://www.ft.com/intl/cms/s/0/f00383f2-cfb3-11e3-a2b7-00144feabdc0.html#axzz3I2RldBII>.

<sup>64</sup> *Concerns Remain Ahead of New Silver Benchmark Debut*, THE WALL STREET JOURNAL (Aug. 14, 2014), <http://online.wsj.com/articles/concerns-remain-ahead-of-new-silver-benchmark-debut-1408043599#printMode>.

withdrawal from the three-seat silver fixing . . . will probably present a problem,”<sup>65</sup> quoting a precious metals banker as stating, “I don’t see how it can function with only two members so they are going to have to work something out.”<sup>66</sup>

**D. The Full Panel Announced it Would Be Disbanding**

162. In the wake of this and “on the heels of increased scrutiny by European and US regulators into precious metals price-setting following the Libor scandal and probe into possible forex market abuse,”<sup>67</sup> Defendants announced that they would disband their combination as of August 14, 2014.<sup>68</sup> “The century-old method of setting silver prices—daily chats among a small coterie of banks—[wa]s being scrapped for something more modern.”<sup>69</sup>

163. As reported by THE FINANCIAL TIMES:

The current daily fix, which has been an integral part of London’s \$1.6tn-a-year silver market for decades, and controlled by a handful of banks, has lost its luster in recent years due to concerns about transparency and vulnerability to

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<sup>65</sup> *Deutsche resigns gold and silver price-fix seats*, THE FINANCIAL TIMES (April 29, 2014), <http://www.ft.com/intl/cms/s/0/f00383f2-cfb3-11e3-a2b7-00144feabdc0.html#axzz3I2RldBII>.

<sup>66</sup> *Deutsche resigns gold and silver price-fix seats*, THE FINANCIAL TIMES (April 29, 2014), at <http://www.ft.com/intl/cms/s/0/f00383f2-cfb3-11e3-a2b7-00144feabdc0.html#axzz3I2RldBII>.

<sup>67</sup> *London’s silver price fix dies after nearly 120 years*, THE FINANCIAL TIMES (May 14, 2014), <http://www.ft.com/intl/cms/s/0/db3188b8-db46-11e3-94ad-00144feabdc0.html?siteedition=intl#axzz38yxp1nAQ>.

<sup>68</sup> Press Release, The London Silver Market Fixing Limited, REUTERS (May 14, 2014), <http://www.reuters.com/article/2014/05/14/idUSnMKWWsY3ca+1e8+MKW20140514>.

<sup>69</sup> *Bullion Fixes in Flux*, THE WALL STREET JOURNAL (June 18, 2014), <http://online.wsj.com/articles/bullion-industry-to-meet-in-july-to-discuss-london-gold-fix-overhaul-1403082075>.

manipulation. It is shutting down because Deutsche Bank failed to find a buyer for its seat, leaving only two other members.<sup>70</sup>

164. In May 2014, three months prior to actually closing operations, the Silver Fixing panel members issued the following press release:

The London Silver Market Fixing Limited

Incorporated in England and Wales With Registered Number 3685039;  
Registered Office: One Silk Street, London EC2Y 8HQ

LONDON, UNITED KINGDOM--(Marketwired - May 14, 2014) - The London Silver Market Fixing Limited (the 'Company') announces that it will cease to administer the London Silver Fixing with effect from close of business on 14 August 2014. Until then, Deutsche Bank AG, HSBC Bank USA N.A. and The Bank of Nova Scotia will remain members of the Company and the Company will administer the London Silver Fixing and continue to liaise with the FCA and other stakeholders.

The period to 14 August 2014 will provide an opportunity for market-led adjustment with consultation between clients and market participants.

The London Bullion Market Association has expressed its willingness to assist with discussions among market participants with a view to exploring whether the market wishes to develop an alternative to the London Silver Fixing.

#### Q&A

1. What will happen after 14 August 2014? Will the Silver Fixing cease to exist?

With effect from the close of business on 14 August 2014, the Company will cease to administer a Silver Fixing, and a daily Silver Fixing Price will no longer be published by the Company.

2. What will happen in the period up to that date?

The Company intends to continue to administer the daily Silver Fixing and publish Silver Fixing Prices throughout that period.

3. Why a three month notice period?

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<sup>70</sup> *CME and Thomson Reuters to set silver Benchmark*, THE FINANCIAL TIMES (July 11, 2014), <http://www.ft.com/intl/cms/s/0/7f838fc4-08d8-11e4-8d27-00144feab7de.html?siteedition=uk#axzz38yxplnAQ>.



Although members of the Company may resign on seven clear days' notice, the members have confirmed that they stand ready to continue the Company's operations until (and including) 14 August 2014.

4. What happens after 14 August 2014 for market participants with contracts referencing the Silver Fix?

The Company is not in a position to comment on such matters, but market participants can speak to their contractual counterparties.

5. What does this mean for the gold, and platinum and palladium fixing companies?

This decision relates only to the London Silver Fixing administered by the Company. The Company is not in a position to comment on other fixings.<sup>71</sup>

165. Once Defendants “decided to pull the plug on the benchmark, they and the London Bullion Market Association “set about finding a replacement.”<sup>72</sup> According to reports, the London Silver Fix was in for a “historic makeover.”<sup>73</sup>

## **IX. THE LONDON SILVER PRICE HAS REPLACED THE SILVER FIX AS THE GLOBAL BENCHMARK PRICE FOR SILVER**

### **A. Fixing the Fix Between the Announcement and the Closing**

166. “The fix is off.”<sup>74</sup> But it has a replacement: the “LBMA Silver Price,” also known as the “London Silver Price.” Leading U.S. silver miner Coeur Mining said that the end

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<sup>71</sup> Press Release, *The London Silver Market Fixing, Ltd.*, REUTERS ( May 14, 2014), <http://www.reuters.com/article/2014/05/14/idUSnMKWwsY3ca+1e8+MKW20140514>.

<sup>72</sup> *A Glimpse of the Future as Silver Breaks 117-Year Tradition*, THE WALL STREET JOURNAL (Aug. 15, 2014), <http://blogs.wsj.com/moneybeat/2014/08/15/a-glimpse-of-the-future-as-silver-breaks-117-year-tradition/>.

<sup>73</sup> Press Release, *The new LBMA Silver Price heralds a new era in precious metals benchmarks*, THOMPSON REUTERS (Aug. 5, 2014), <http://blog.financial.thomsonreuters.com/new-silver-fix-heralds-new-era-precious-metals-benchmarks/>.

<sup>74</sup> *What's The London Silver Fix, And Why's It Going Away?* THE WALL STREET JOURNAL (May 14, 2014), <http://blogs.wsj.com/moneybeat/2014/05/14/whats-the-london-silver-fix-and-whys-it-going-away/>.

of the Silver Fix and the launch of its replacement was “somewhat surprising, the timing I guess, and the abrupt transition, but it needed to happen.”<sup>75</sup>

167. The LBMA Silver Price (“LSP”) is administered by the London Bullion Market Association (“LBMA”), the main standard setting organization for silver and gold bullion, in conjunction with the CME Group, the operator of the COMEX, and Thomson Reuters, the media company that reports other financial benchmarks, such as LIBOR. CME and Thomson Reuters were chosen by the LBMA after a selection process, which included bids from numerous financial companies to run the replacement for the Silver Fix, and which was the subject of some controversy.

168. The new process features electronic rather than telephonic trading, but retains similarities to the Silver Fix in that it is an auction among a group of industry panelists. Notably, two of three charter members of the LSP panel are Defendants HSBC and Scotiabank. The LSP and COMEX futures have neatly tracked each other since the LSP began in August.

169. The current members of the LBMA’s five LSP panel are: Scotiabank, HSBC JPMorgan, Mitsui, Bank of Toronto and UBS.<sup>76</sup> The auction is operated by CME and administered by Thomson Reuters, but still takes place daily at 12:00 noon London time. According to the LBMA itself, “The earlier benchmarking process has been followed in order to minimize any possible disruptions and enable a seamless transition for the market.”<sup>77</sup>

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<sup>75</sup> *Matter of Time for the Gold Fix to Follow Silver*, KITCO (Aug. 13, 2014), <http://www.kitco.com/news/video/show/Kitco-News/751/2014-08-13/Matter-Of-Time-For-The-Gold-Fix-To-Follow-Silver---Coeur-Mining>.

<sup>76</sup> LBMA Website, <http://www.lbma.org.uk/pricing-and-statistics>.

<sup>77</sup> LBMA Website, <http://www.lbma.org.uk/LBMA-silver-price>.

170. Despite the shift from telephones to computers, critics have complained that the process for selecting the new fixing as well as the fix itself are flawed, prompting some to say, “Meet the New Fix, Same as the Old Fix.”<sup>78</sup>

**1. The Search for a Replacement Started Almost as Soon as the Announcement That the Silver Fix Was Ending**

171. The LBMA publicly spearheaded the effort to install a replacement for the Silver Fix. On May 14, 2014, the same day that the London Silver Market Fixing Ltd. announced that the Silver Fix would no longer exist in ninety days, the LBMA announced that it would lead the charge to find a replacement. Ruth Crowell, LBMA CEO, stated, “As part of our role as the trade association for the London Bullion Market, the LBMA has launched a consultation in order to ensure the best way forward for a London silver daily price mechanism. The LBMA will work with market participants, regulators and potential administrators to ensure the London Silver Market continues to serve efficiently the needs of market users around the world. As part of the consultation process, the LBMA will be actively approaching market participants requesting feedback.”<sup>79</sup>

172. Both HSBC and Scotiabank swiftly made public statements committing to creating an “alternative” to the Silver Fix (of which they would eventually take part). Upon the announcement, a “spokesperson for HSBC said the bank remains ‘committed to the silver market and, if the market wishes to develop an alternative to the London Silver Fixing, is willing to take

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<sup>78</sup> *New ‘LBMA Silver Price’ Farce – Still Shockingly Non-Transparent*, ZERO HEDGE (Aug. 17, 2014), <http://www.zerohedge.com/news/2014-08-17/new-%E2%80%98lbma-silver-price%E2%80%99-farce-still-shockingly-untransparent>.

<sup>79</sup> Press Release, London Bullion Market Association, THE LONDON SILVER MARKET (May 14, 2014), [http://www.lbma.org.uk/blog/lbma\\_media\\_centre/post/the-london-silver-market/](http://www.lbma.org.uk/blog/lbma_media_centre/post/the-london-silver-market/).

part in discussions with other market participants.’’<sup>80</sup> Scotiabank’s global head of foreign exchange and precious metals said in a statement that the Canadian bank “will work with market participants to find an alternative to the silver fix.’’<sup>81</sup>

**a. The LBMA**

173. The LBMA describes itself as “an international trade association, representing the London market for gold and silver bullion which has a global client base.”<sup>82</sup> The LBMA sets “refining standards, trading documentation and the development of good trading practices. The maintenance of the Good Delivery List, including the accreditation of new refiners and the regular retesting of listed refiners, is the most important core activity of the LBMA.”<sup>83</sup> The London Good Delivery List “is regarded as the only globally accepted accreditation for the bullion market, ensuring that the wholesale bullion bars traded in the market meet standards and quality required by Good Delivery.”<sup>84</sup>

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<sup>80</sup> Curtain to Fall on London's Historic Silver Benchmark, THE WALL STREET JOURNAL (May 14, 2014), <http://online.wsj.com/articles/SB10001424052702304908304579561202115402582>.

<sup>81</sup> Curtain to Fall on London's Historic Silver Benchmark, THE WALL STREET JOURNAL (May 14, 2014), <http://online.wsj.com/articles/SB10001424052702304908304579561202115402582>.

<sup>82</sup> LBMA Website, <http://www.lbma.org.uk/about-us>.

<sup>83</sup> LBMA Website, <http://www.lbma.org.uk/about-us>.

<sup>84</sup> LBMA Website, <http://www.lbma.org.uk/the-london-bullion-market>. As it describes itself, the LBMA pre-dates the Silver Fix: “The roots of the London Bullion Market can be traced to the partnership between Moses Mocatta and the East India Company, who started shipping gold together towards the end of the 17th century. Shortly afterwards, while Sir Isaac Newton was master of the Royal Mint, gold in England was overvalued so it became more freely circulated than silver. This increased circulation quickly led to England having a gold based coinage, whereas the rest of Europe remained silver based until the 1850s.” *Id.*

174. The leadership of the LBMA continues to include Defendants Deutsche, Scotiabank, and HSBC, as well as other multinational banks that have come under investigation for conduct relating to other critical financial benchmarks and markets, including not only the Gold Fixing, but also Aluminum, Credit Default Swaps, Forex, ISDAfix, LIBOR, and Zinc. The Management Committee of the LBMA includes executives from Scotiabank and HSBC, among others. The LBMA's Regulatory Affairs Committee includes executives from Deutsche, Scotiabank, and HSBC. There are thirteen LBMA Market Making Members, including Deutsche, Scotiabank, and HSBC. The others are Bank of America, Barclays, Citibank, Credit Suisse, Goldman Sachs, JPMorgan, Mitsui, Morgan Stanley, Societe Generale, and UBS.

**2. After Search and Soliciting Bids, the LBMA Awarded the Replacement for the Fix to CME and Thomson Reuters**

**a. Consultation**

175. The LBMA held what it called a consultation, whereby various financial companies vied for the opportunity to run the replacement for the Silver Fix. The "consultation included silver producers, refiners and manufacturers. The Financial Conduct Authority and Bank of England attended," but only as "observers."<sup>85</sup> The LBMA sought answers to questionnaires, eventually holding a "Seminar on 20th June which was open to LBMA members, ISDA members and other bullion market participants to assess presentations from possible solution providers for a London daily silver price mechanism."<sup>86</sup> The top seven proposals were presented at the seminar. Among the finalists who presented in addition to CME and Thomson

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<sup>85</sup> *CME and Thomson Reuters to set silver benchmark*, THE FINANCIAL TIMES (July 11, 2014), <http://www.ft.com/intl/cms/s/0/7f838fc4-08d8-11e4-8d27-00144feab7de.html?siteedition=uk#axzz38yxplnAQ>.

<sup>86</sup> LBMA Website, [http://www.lbma.org.uk/blog/lbma\\_media\\_centre/post/lbma-2014-silver-price-consultation-seminar/](http://www.lbma.org.uk/blog/lbma_media_centre/post/lbma-2014-silver-price-consultation-seminar/).

Reuters,<sup>87</sup> were Bloomberg,<sup>88</sup> Intercontinental Exchange (“ICE”),<sup>89</sup> The London Metal Exchange (“LME”),<sup>90</sup> and Platts.<sup>91</sup>

176. On July 11, 2014, after reaching what it called a “clear market consensus,” the LBMA announced that the CME Group and Thomson Reuters “won” the new fix.<sup>92</sup> Ruth Crowell, the CEO of the LBMA that assumed office just as Deutsche was announcing its resignation in early 2014,<sup>93</sup> commented:

I am delighted that there was a clear market consensus for the CME Group & Thomson Reuters joint proposal. The LBMA liaised throughout the consultation process with the FCA. The LBMA is grateful for all the support, comments and feedback it has received from all market participants. A particular thank you to ISDA, and the Silver Institute for all their constructive support of the LBMA during this consultation process. We will work in partnership with the CME Group, Thomson Reuters and price participants to implement the solution in time for testing in early August and go live on the 15th August.<sup>94</sup>

177. The CME also issued a press release upon winning the bid:

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<sup>87</sup> Presentation at <http://www.lbma.org.uk/assets/events/TRCME%20public.pdf>.

<sup>88</sup> Presentation at <http://www.lbma.org.uk/assets/events/bloomberg%20public%20update.pdf>.

<sup>89</sup> Presentation at <http://www.lbma.org.uk/assets/events/ICE%20public.pdf>.

<sup>90</sup> Presentation at <http://www.lbma.org.uk/assets/events/LME%20public.pdf>.

<sup>91</sup> Presentation at <http://www.lbma.org.uk/assets/events/Platts%20public.pdf>.

<sup>92</sup> Press release, *LBMA Silver Price Solution: CME Group & Thomson Reuters*, LONDON BULLION MARKET ASSOCIATION (July 11, 2014), [http://www.lbma.org.uk/blog/lbma\\_media\\_centre/post/silverpricesolution/](http://www.lbma.org.uk/blog/lbma_media_centre/post/silverpricesolution/).

<sup>93</sup> Ms. Crowell is a 2002 graduate of Kenyon College, where she majored in English. After two years as a paralegal at Norton Rose and an internship at UN Watch, Ms. Crowell joined the LBMA in 2006. LinkedIn Profile, <https://www.linkedin.com/pub/ruth-crowell/21/256/451>.

<sup>94</sup> Press release, *LBMA Silver Price Solution: CME Group & Thomson Reuters*, LONDON BULLION MARKET ASSOCIATION (July 11, 2014), [http://www.lbma.org.uk/blog/lbma\\_media\\_centre/post/silverpricesolution/](http://www.lbma.org.uk/blog/lbma_media_centre/post/silverpricesolution/).

LONDON, July 11, 2014 /PRNewswire/ -- CME Group, today released the following statement regarding the London Bullion Market Association's London Silver Price Market Consultation:

“We are honoured to have been appointed by the OTC silver market participants and the London Bullion Markets Association to provide an electronic solution that will transform the London OTC silver spot price,” said William Knottenbelt, Senior Managing Director, EMEA (Europe, Middle East, Africa) for CME Group. “CME Group's transparent, transaction-based OTC auction platform, combined with Thomson Reuters’ independent Benchmark Administration services will deliver a strong London footprint, a deep understanding of the silver markets, and a fully IOSCO-compliant, FCA-regulated solution to the London bullion marketplace. As an industry leader in precious metals price discovery, we understand how important the silver spot benchmark is to the physical metals industry, and we look forward to continuing to engage with key metals industry stakeholders to deliver our new solution on August 15th.”<sup>95</sup>

178. Thomson Reuters too issued a press release on August 5, 2014:

The silver market is set for a historic makeover as Thomson Reuters and the CME Group are set to operate the new LBMA Silver Price from 15 August, as the current 117-year old process comes to an end.

The silver fix – which is used by producers, consumers and investors on a daily basis – is currently set every day at noon by three banks via a conference call, working out a price at which their customers are willing to buy and sell the metal. A City of London Institution, the silver fix is used to price for mining sales contracts and exchange-traded funds.

The London Bullion Market Association (LBMA) confirmed that the existing daily silver fix, will be replaced on August 15 by the new LBMA Silver Price with CME Group providing a price platform and methodology, with Thomson Reuters responsible for administration and governance.

The new method offers an auction-based, auditable electronic system that will match buying and selling orders to reach a benchmark for the price of silver. All of the auctions can be viewed live on Thomson Reuters flagship desktop, Eikon.<sup>96</sup>

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<sup>95</sup> Press Release, *CME Group Statement on LBMA London Silver Price Market Consultation*, CME GROUP (July 11, 2014), <http://cmegroup.mediaroom.com/index.php?s=43&item=3529>.

<sup>96</sup> Press Release, *The new LBMA Silver Price heralds a new era in precious metals benchmarks*, THOMPSON REUTERS (Aug. 5, 2014), <http://blog.financial.thomsonreuters.com/new-silver-fix-heralds-new-era-precious-metals-benchmarks/>.

### 3. The LBMA Silver Price Launched on August 15, 2014

179. On August 15, 2014, the “replacement” of the Silver Fix began. Just prior, “[i]n a small boardroom at the LBMA’s London offices, a large plasma screen stared blankly,” reported THE WALL STREET JOURNAL.<sup>97</sup> “‘Give it a few seconds,’ said Ruth Crowell, chief executive of the London Bullion Market Association, at 11:59 am U.K. time Friday. . . . The clock struck 12pm. After a few moments of inertia, the platform ticked into life and, after a brief auction, the first-ever electronic silver fix was generated: \$19.86 per troy ounce.”<sup>98</sup> The LBMA announced:

On 15 August, CME Group and Thomson Reuters launched the new LBMA Silver Price, in partnership with the London Bullion Market Association (LBMA). CME Group provides the electronic auction platform on which the price is calculated and Thomson Reuters is responsible for administration and governance of the benchmark as well as distribution. The LBMA accredits the market participants.

In order to enable a seamless transition for the OTC silver market, the new process for the LBMA Silver Price maintains continuity with the previous global spot benchmark the London Silver Fix, that existed for 117 years. The fully electronic auction platform increases the transparency of the price-setting mechanism and allows for a wider number of banks, trading houses, refiners and producers to participate.<sup>99</sup>

180. Ruth Crowell, CEO of the LBMA further commented:

I am delighted that the first LBMA Silver Price will be launched today. This is the culmination of an intense three month period of consultation, discussions and preparation. I would like to take the opportunity to thank all those who have been involved in the process. The LBMA has been overwhelmed with the support that

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<sup>97</sup> *A Glimpse of the Future as Silver Breaks 117-Year Tradition*, THE WALL STREET JOURNAL (Aug. 15, 2014), <http://blogs.wsj.com/moneybeat/2014/08/15/a-glimpse-of-the-future-as-silver-breaks-117-year-tradition/>.

<sup>98</sup> *A Glimpse of the Future as Silver Breaks 117-Year Tradition*, THE WALL STREET JOURNAL (Aug. 15, 2014), <http://blogs.wsj.com/moneybeat/2014/08/15/a-glimpse-of-the-future-as-silver-breaks-117-year-tradition/>.

<sup>99</sup> LBMA Website, <http://www.cmegroup.com/international/emea/lbma-silver-price.html>.



it has received from its partners, CME Group and Thomson Reuters as well as LBMA members and other participants in the wider market.<sup>100</sup>

181. THE WALL STREET JOURNAL reported of the launch: “With the unveiling of London’s shiny, new silver benchmark Friday, metal producers and traders are hoping to head off lingering concerns about the credibility of the market. But as the price-setting process undergoes the first major overhaul in more than a century, there are signs the revamped process isn’t quite ready.”<sup>101</sup>

#### 4. The LBMA Methodology

182. The LBMA describes the new system as follows:

The LBMA Silver Price is determined via an electronic auction based solution which is based on transactions and is auditable. Five price participants have been accredited to contribute to the LBMA Silver Price: HSBC Bank USA NA, JPMorgan Chase Bank, Mitsui & Co Precious Metals Inc., The Bank of Nova Scotia - ScotiaMocatta and UBS. The LBMA Silver Price is set in a series of auction rounds with each round lasting 30 seconds. The auction begins at 12:00 and participants input their buy volume and sell volume orders in lakhs (100,000 ounces) or quarter lakhs (25,000 ounces). The initial price at the start of the process is likely to be close to the spot price. In the first round the system algorithm will attempt to match buy and sell orders within the permitted tolerance level of 300,000 ounces (or 3 lakhs). If the buy and sell orders are out of tolerance, the auction price will change and the auction will restart. The process will continue until the buy and sell volumes are in tolerance and the equilibrium price is set.<sup>102</sup>

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<sup>100</sup> Press Release, *CME Group, LBMA and Thomson Reuters launches the first LBMA Silver Price today*, LONDON BULLION MARKET ASSOCIATION (Aug. 15, 2014), [http://www.lbma.org.uk/blog/lbma\\_media\\_centre/post/the-first-lbma-silver-price/](http://www.lbma.org.uk/blog/lbma_media_centre/post/the-first-lbma-silver-price/).

<sup>101</sup> Concerns Remain Ahead of New Silver Benchmark Debut, THE WALL STREET JOURNAL (Aug. 14, 2014), <http://online.wsj.com/articles/concerns-remain-ahead-of-new-silver-benchmark-debut-1408043599#printMode>.

<sup>102</sup> LBMA Website, <http://www.lbma.org.uk/pricing-and-statistics>.

## 5. Concerns over the “New Fix”

183. Concerns have been expressed that the process for choosing the replacement were less than transparent. To start, some have questioned the independence of the Silver Fix and the LBMA, given that the LBMA announced it would be taking over the search for a replacement on the same day that the Silver Fix announced it would be shutting down. In addition, it was not until August 15, 2014 that the members of the new panel were announced. Two of three original Silver Fixing members, Defendants HSBC and Scotiabank, were both included in the LBMA Silver Price. Both HSBC and Scotiabank, as Market Making members of the LBMA, sit on the LBMA executive and regulatory committees responsible for overseeing the new silver fixing.

184. In between, concerns have been expressed as to the transparency of the selection process, potential conflicts of interest, and that though there is now electronic trading, the new scheme presents only a modest change, and, moreover, is technically problematic. It is reported that some have “likened the user interface of the new CME/Thomson Reuters silver trading platform to something from a command prompt MS-DOS user interface from the 1970s.”<sup>103</sup>

185. One significant concern is “independent review” of the proposals by CME/Reuters, Bloomberg, the LME, Platts, and others. The independent review was conducted by Jonathan Spall,<sup>104</sup> who worked in precious metals at Barclays until earlier this year.<sup>105</sup> Barclays was fined \$44 million by the FCA for gold market manipulation in connection with the

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<sup>103</sup> *New ‘LBMA Silver Price’ Farce – Still Shockingly Non-Transparent*, ZERO HEDGE (Aug. 17, 2014), <http://www.zerohedge.com/news/2014-08-17/new-%E2%80%99lbma-silver-price%E2%80%99-farce-still-shockingly-untransparent>.

<sup>104</sup> *CME, Thomson Reuters win battle to replace century-old silver benchmark*, REUTERS (July 11, 2014), at <http://www.reuters.com/article/2014/07/11/us-silver-fix-idUSKBN0FG14A20140711>.

<sup>105</sup> *Barclays head of spot gold trading leaves bank –sources*, REUTERS (May 20, 2014), at <http://www.reuters.com/article/2014/05/20/idUSL6N0O63OT20140520>.

Fix.<sup>106</sup> Mr. Spall, after conducting his independent review of the new silver fix, was named the head of the London Platinum and Palladium Fix.<sup>107</sup>

186. It appears that THE FINANCIAL TIMES was indeed accurate in reporting that while losing the “unfortunate name,” in favor of a bland one, and the “private teleconference,” in favor of electronic trading, “anyone thinking there has been a complete change in the way the daily snapshot of the silver market is conducted would be mistaken.”<sup>108</sup>

187. While the LSP was introduced as more transparent than the Fix, as it allowed the public to view the fixings in real-time, as of January 12, 2015, that has changed. Live viewing is only available to those who pay to play. This is in sharp contrast to how the LSP was portrayed at first:

“This new system combines a robust and reliable pricing mechanism with strong governance, as well as transparency for all of its users,” said Kris Carlson, Global Head of Metals, Thomson Reuters. . . . “We are combining continuity with innovation, ensuring not only that everyone continues to receive a reliable daily silver price through this transition to the new system, but also that they enjoy a greater understanding of how this process works by watching the auction live on their desktops, including via Thomson Reuters Eikon.”

LBMA Chief Executive, Ruth Crowell said, “I am pleased that we have been able to deliver an on-time solution which meets the requirements of the London Silver Market. The new mechanism allows more direct participation and the automated auction feed ensures that the same real-time information is available to all participants and market users via numerous data vendors.”

188. Less than five months later, however, and now that the dust has settled, that real-time information is available only to those insiders who pay for it. The rest of the public is

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<sup>106</sup> *Barclays Fined Over Gold Fixing U.K.*, THE WALL STREET JOURNAL (May 23, 2014), <http://online.wsj.com/articles/SB10001424052702303480304579579360337255896>.

<sup>107</sup> *Jonathan Spall to Chair Platinum to Palladium Fixings*, BLOOMBERG (Aug. 4, 2014), <http://www.bloomberg.com/news/2014-08-04/jonathan-spall-to-chair-platinum-to-palladium-fixings.html>.

<sup>108</sup> *New silver price is ‘improvement’ on fix*, THE FINANCIAL TIMES (July 16, 2014), <http://www.ft.com/intl/cms/s/0/4053ff04-0ccb-11e4-90fa-00144feabdc0.html#axzz38yxplnAQ>.

subject to a 15 minute delay. The LBMA, CME, and Thomson Reuters state: “[a]s of Monday 12 January 2015, the existing real-time LBMA Silver Price data which is free of fees becomes fee liable. A subset of the full content continues to be available on a free basis with a 15 minute delay.”

189. Moreover, those “wishing to use or redistribute the LBMA Silver Price must enter into a licensing agreement.”

## **X. ECONOMIC EVIDENCE FURTHER SUPPORTS COLLUSION AND MANIPULATION OF THE SILVER FIX DURING THE CLASS PERIOD**

### **A. Expert Analysis Reveals Systematic Suppression of Spot Market Silver Prices Throughout the Class Period**

190. Plaintiffs have retained Professor Rosa Abrantes-Metz of the New York University Stern School of Business, perhaps the most prominent academic in the world on benchmark manipulation. Her work was instrumental in uncovering the manipulation of LIBOR which has since lead to a global investigation of interest rate benchmarks and massive fines related to this manipulative conduct.<sup>109</sup> Professor Abrantes-Metz analyzed the Silver Fix and its impact on prices in the silver market and studied the price movements around the start of the Silver Fixing at 12:00 P.M. London time, looking for outliers as well as signs of systematic price suppression.

191. Professor Abrantes-Metz started by examining the normalized average price of spot market silver between January 1, 2001 and July 31, 2014. This analysis is intended to capture the average pattern of price changes throughout the day. The results are displayed in Figures 4 through 31 below. These charts show the normalized average spot market silver price

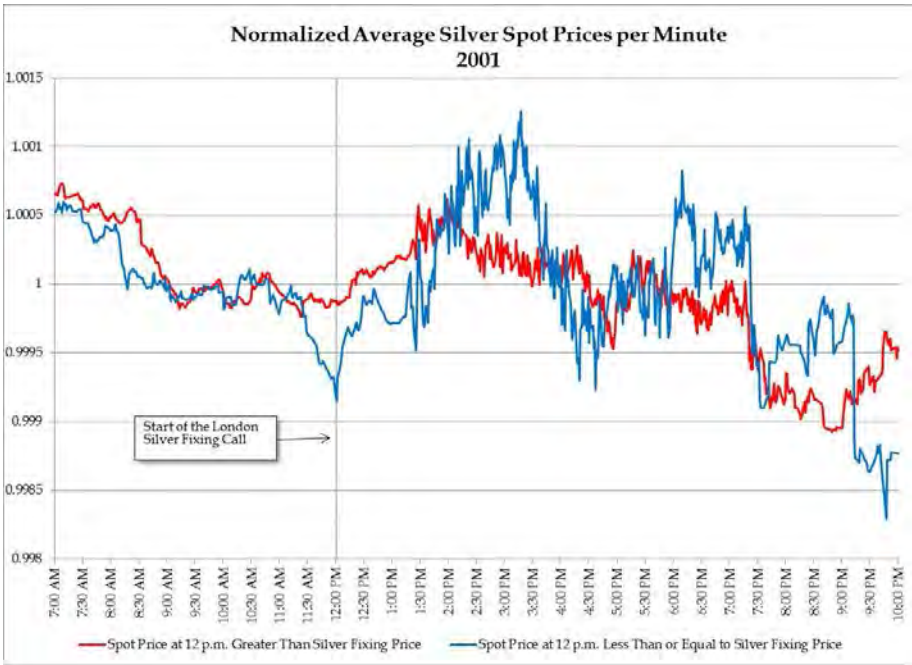
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<sup>109</sup>See, e.g., R. Abrantes-Metz, M. Kraten, A. Metz, & G. Seow, *LIBOR Manipulation?* JOURNAL OF BANKING & FINANCE 36 (2012), 136-150 (available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1201389](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1201389)).

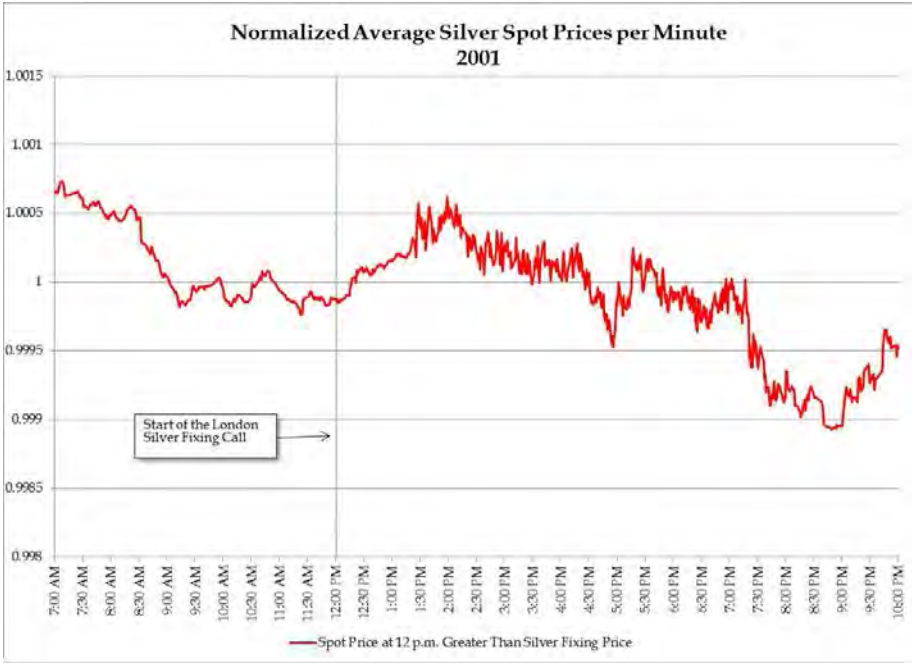
for two different groups of days between January 1, 2001 and July 31, 2014. The first group, represented by the red line, depicts the average price per minute across the year for days in which the silver spot price at 12:00 P.M. London time, *i.e.*, the start of the Silver Fix, is greater than the Silver Fix price. The second group, represented by the blue line, shows the average normalized price for the same year over the subset of days for which the silver spot price at 12:00 P.M. London time is less than or equal to the Silver Fix price.

192. Figures 4 through 31 show an unusually large downward price spike at the time of the Silver Fixing. These spikes occur during nearly every year for days in the “red group,” where the price of silver is higher than the Fix at 12:00 P.M. London time. However, the same downward spike is also observed for days in the “blue group,” where the price of silver is actually *less than or equal to* the Fix at 12:00 P.M. London time, only that in these cases the downward spike occurs on average a few minutes prior to 12:00 P.M. These price spikes intensify beginning in 2004, as the decrease in price observed get significantly larger, particularly on days in the red group where the price of silver is higher at the start of the Silver Fix.

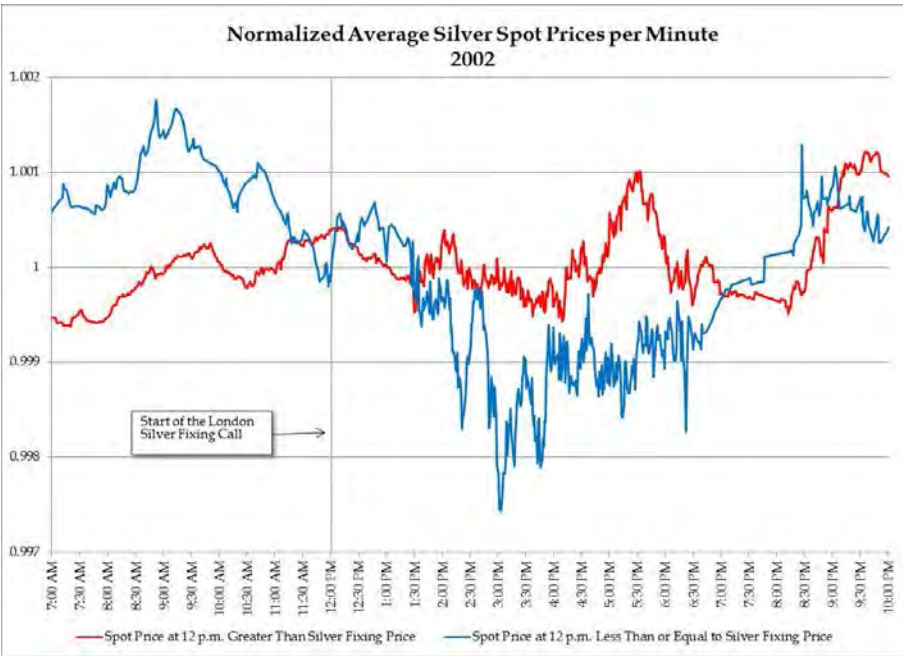
**FIGURE 4**



**FIGURE 5**



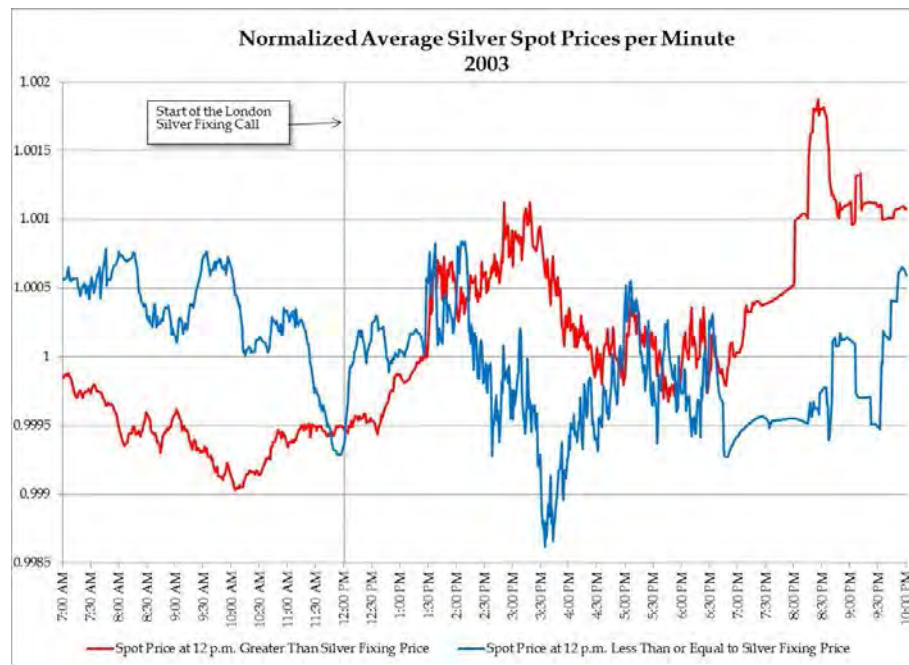
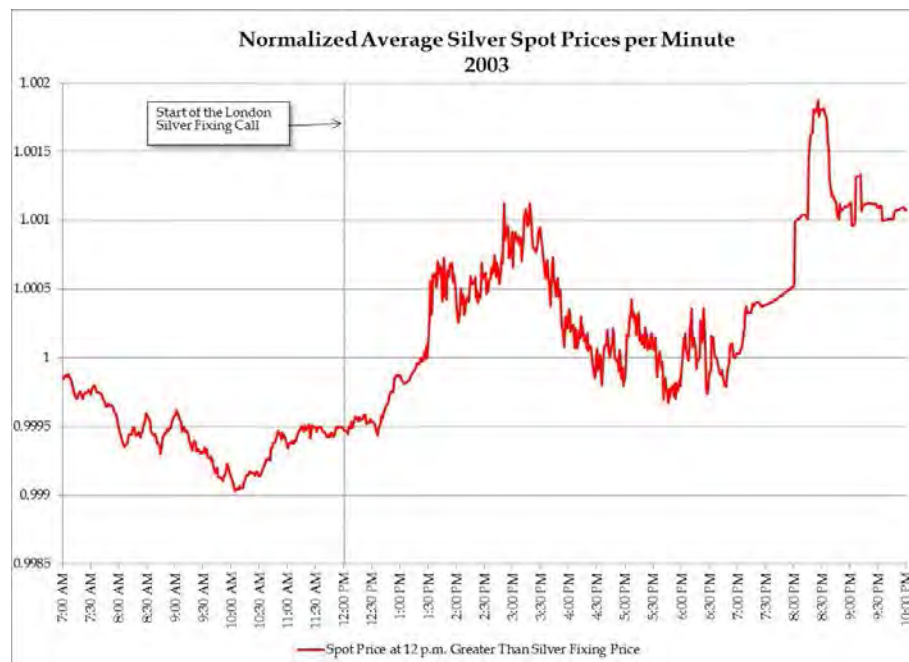
**FIGURE 6**



**FIGURE 7**

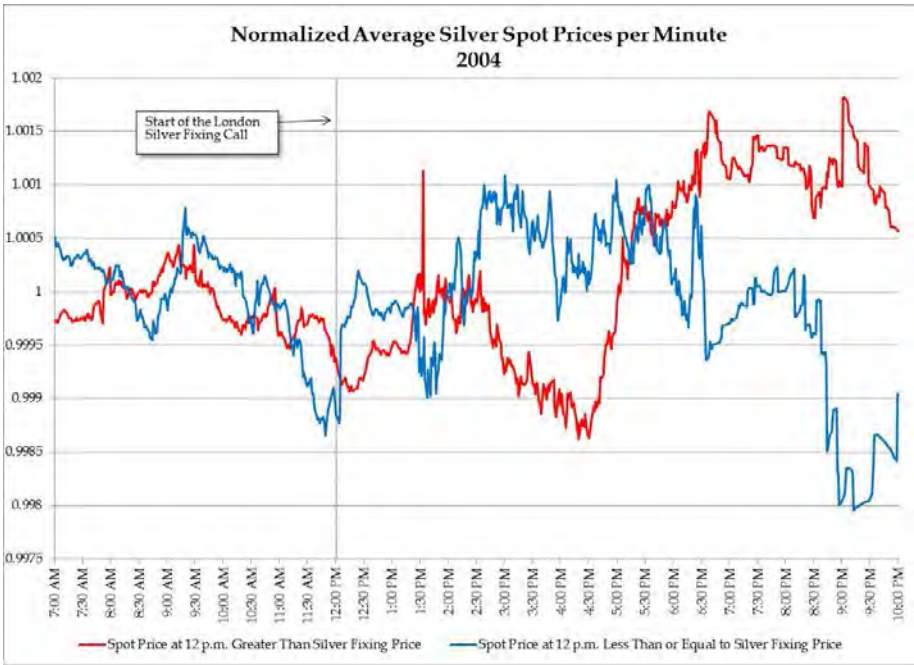




**FIGURE 8****FIGURE 9**



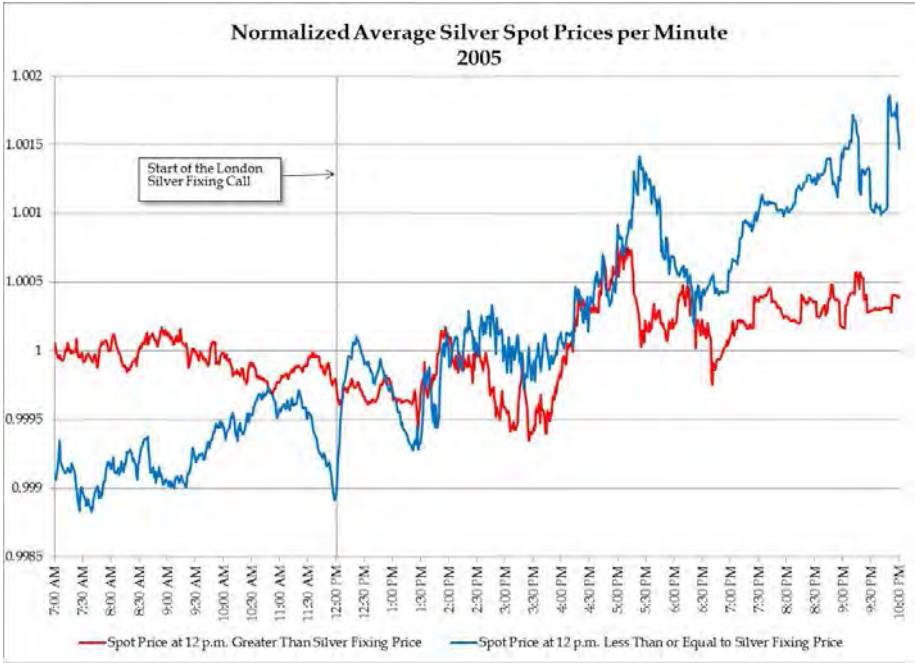
**FIGURE 10**



**FIGURE 11**



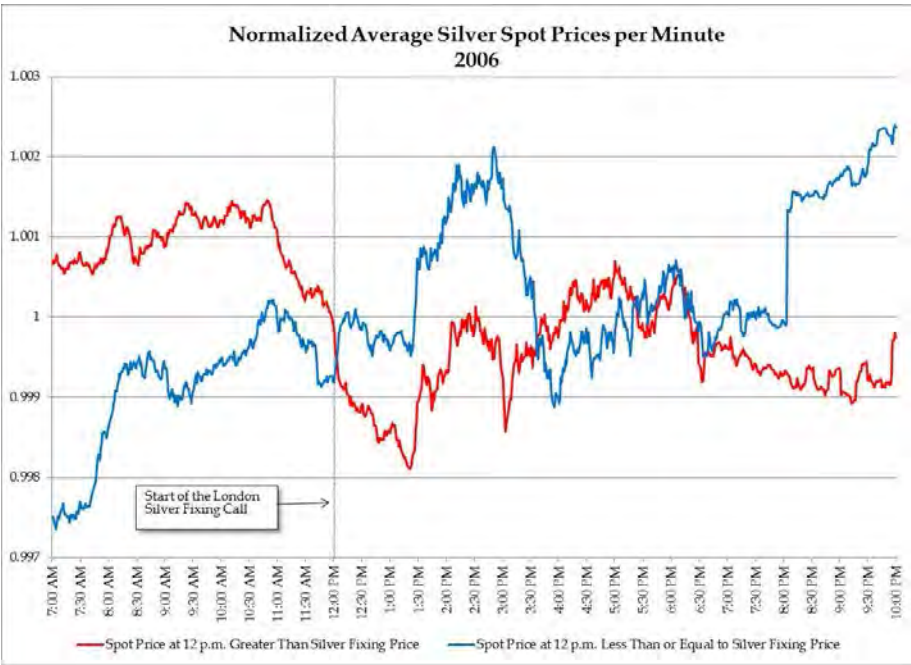
**FIGURE 12**



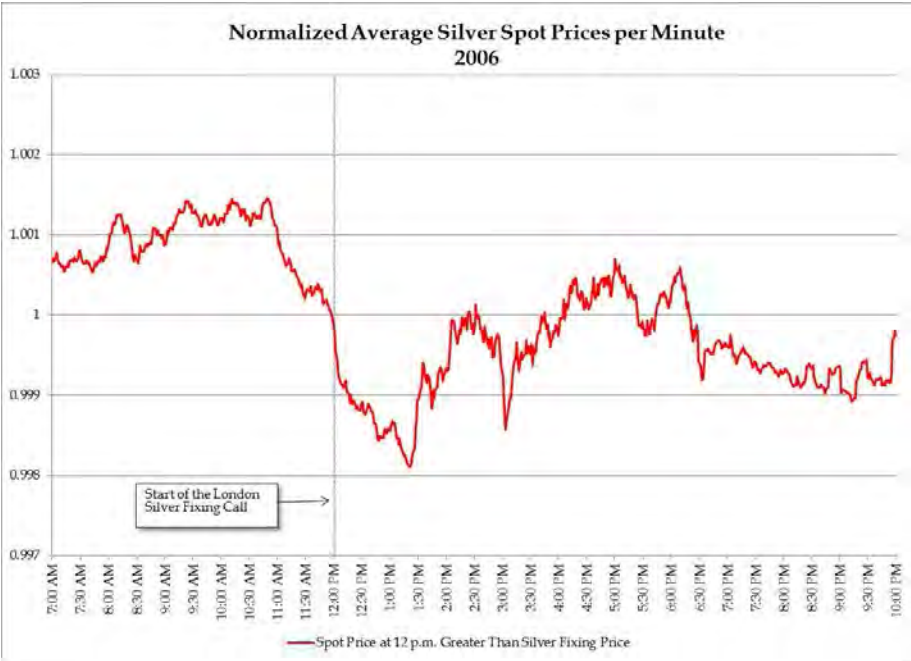
**FIGURE 13**



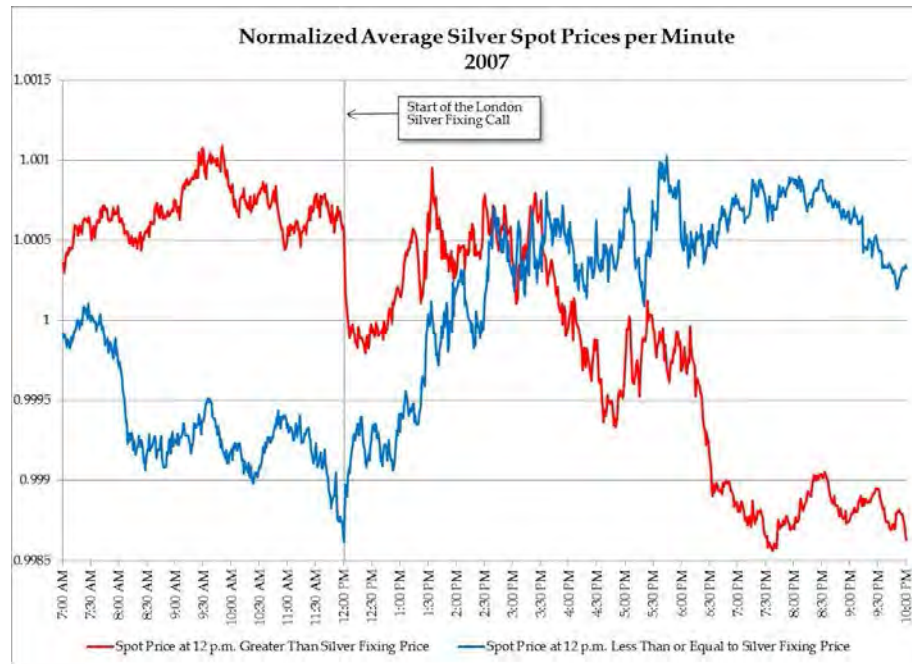
**FIGURE 14**



**FIGURE 15**



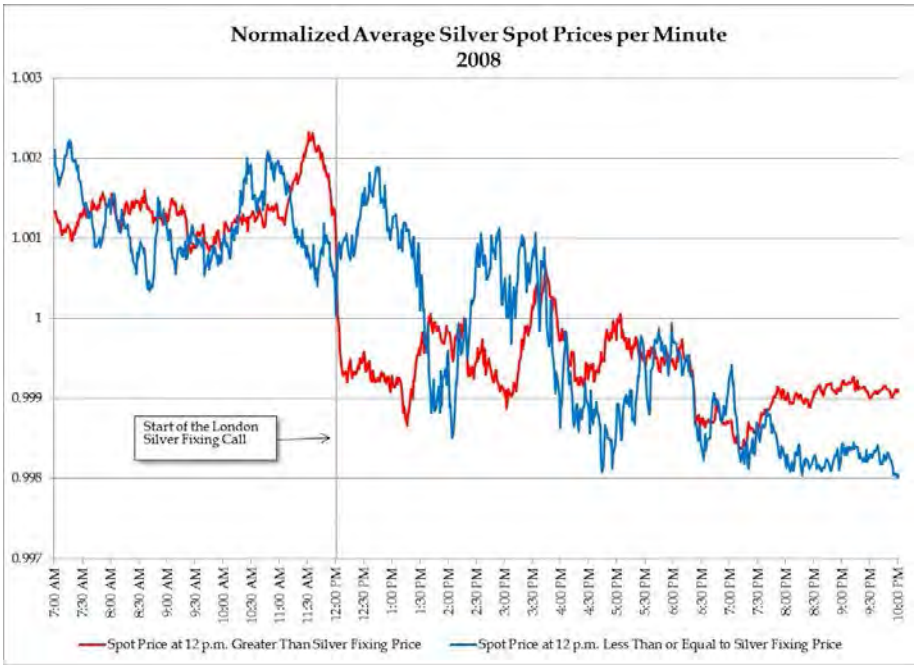
**FIGURE 16**



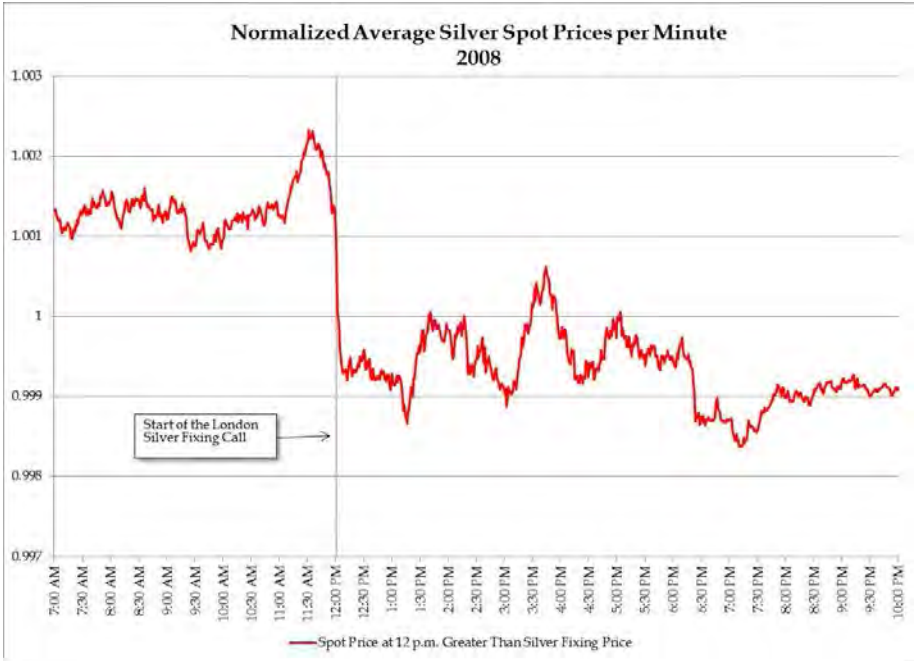
**FIGURE 17**



**FIGURE 18**

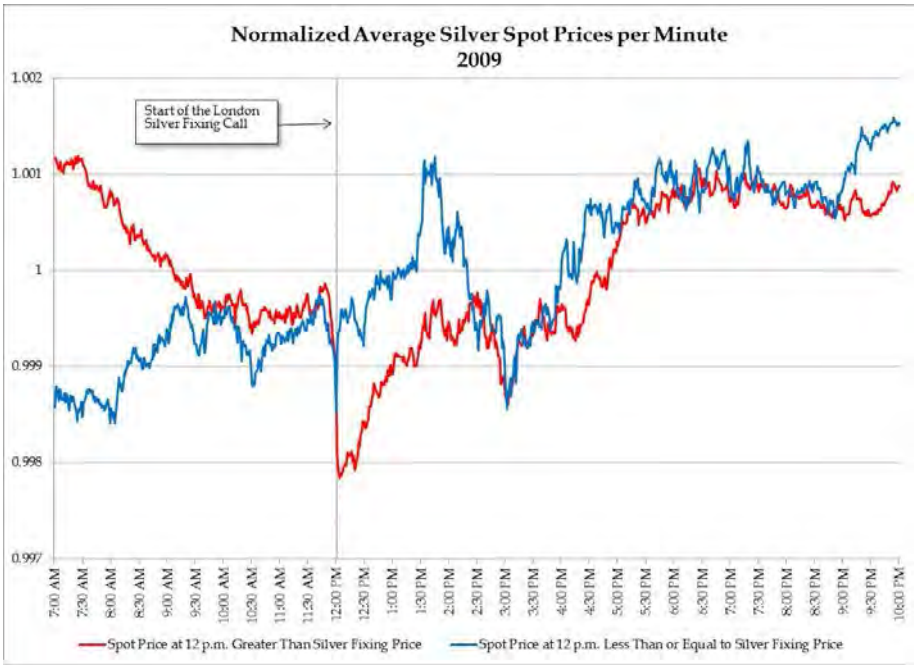


**FIGURE 19**

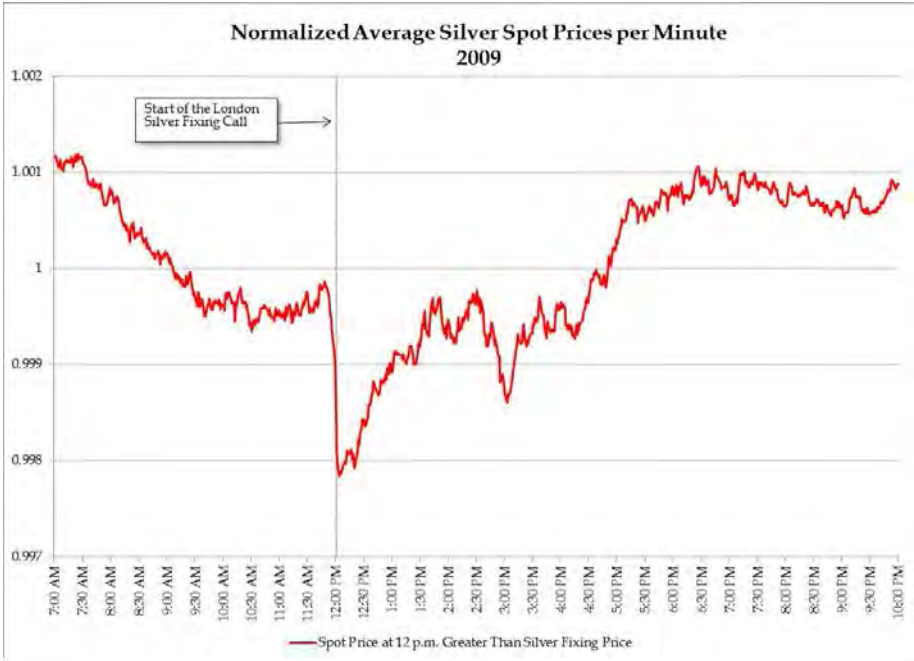


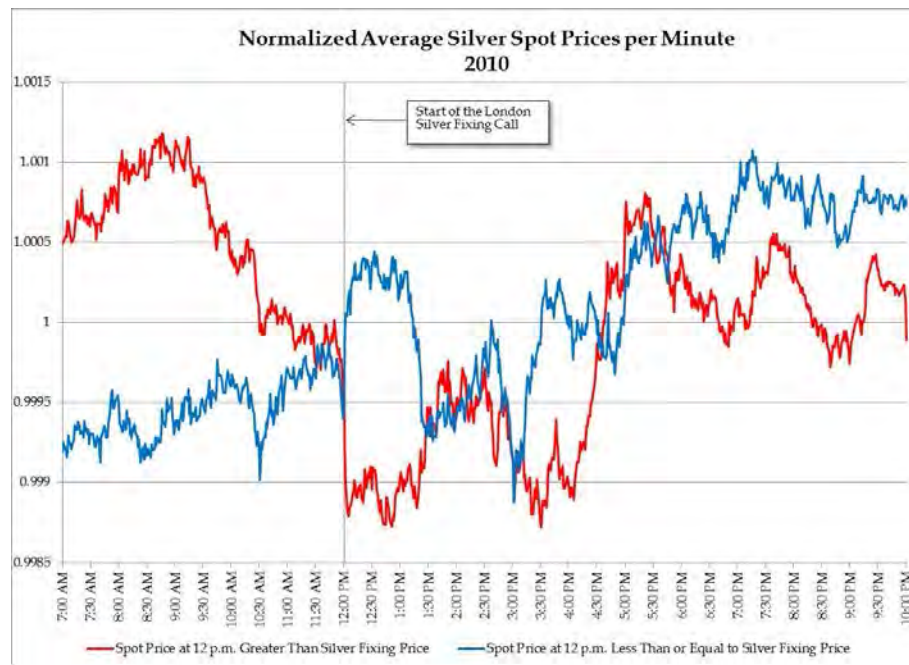
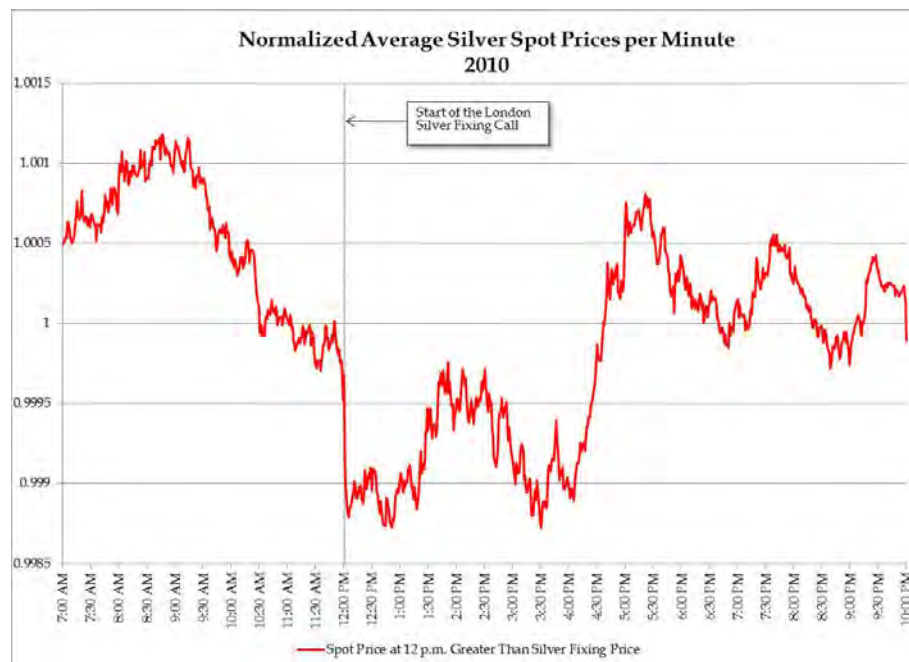


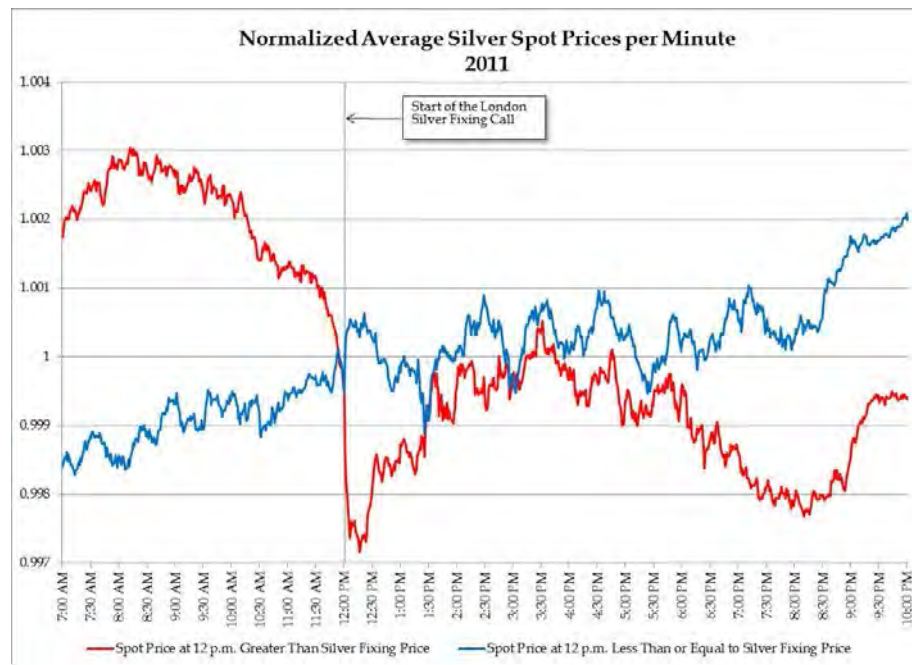
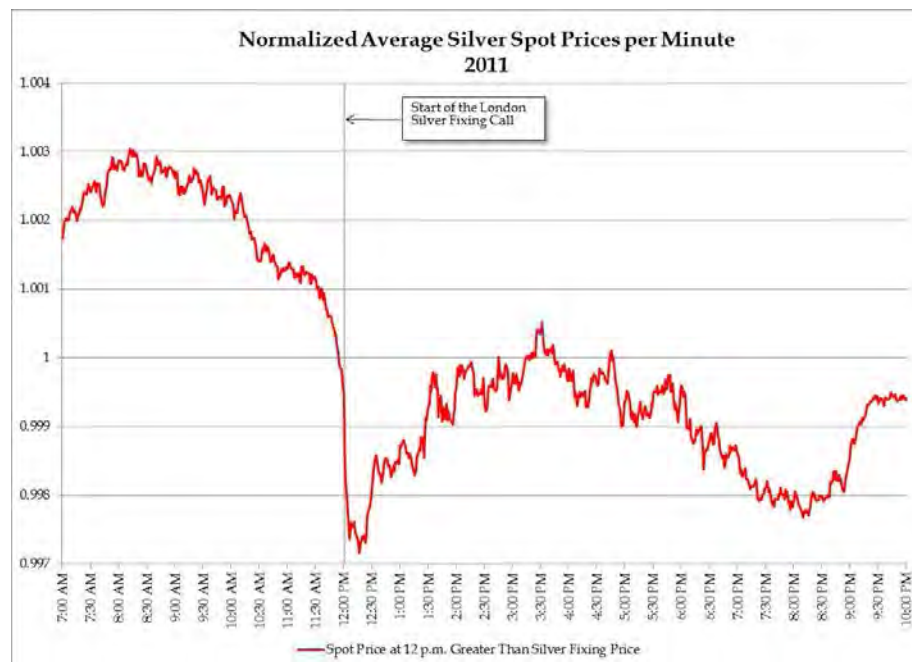
**FIGURE 20**



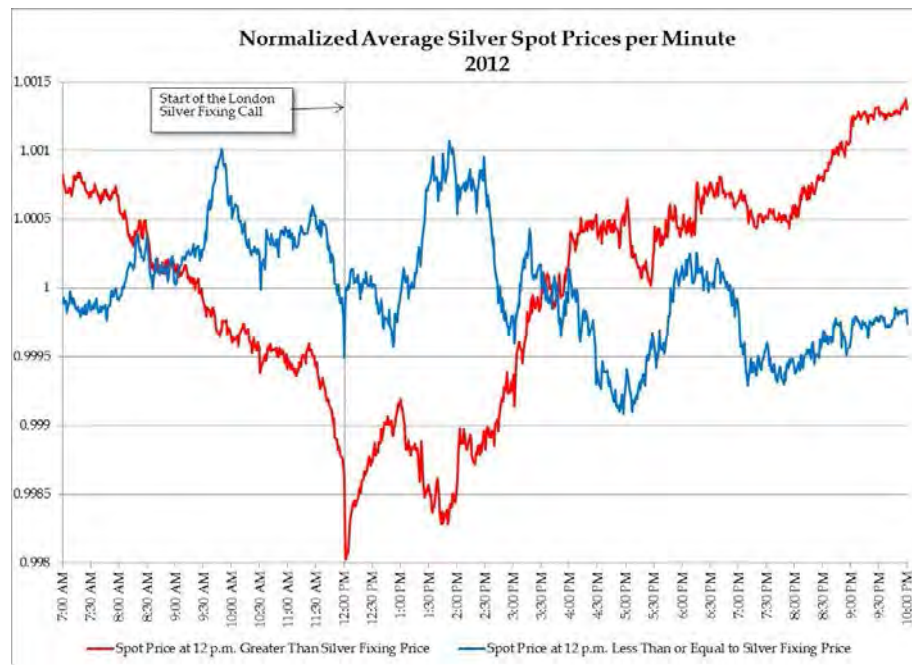
**FIGURE 21**

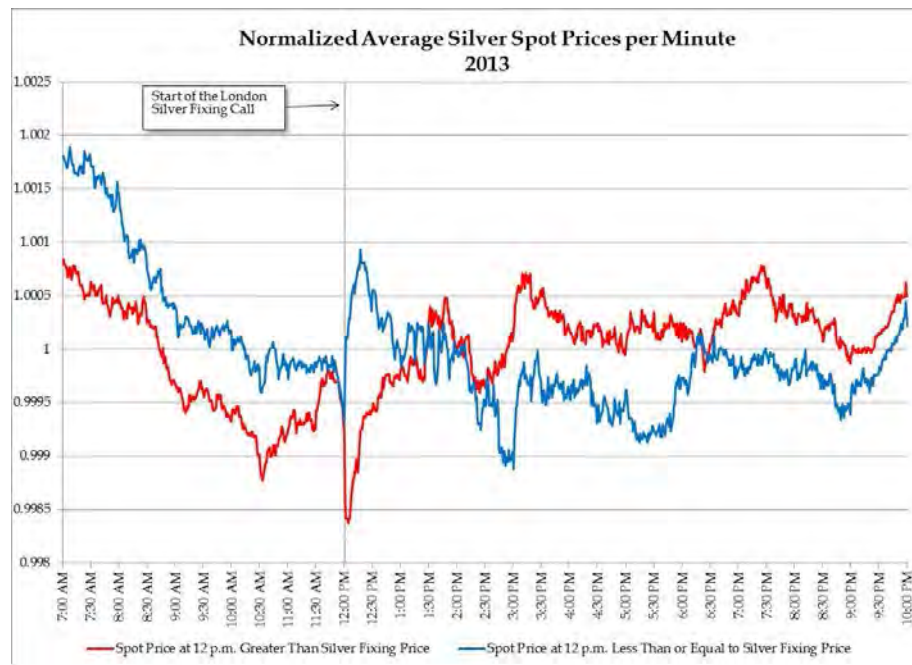


**FIGURE 22****FIGURE 23**

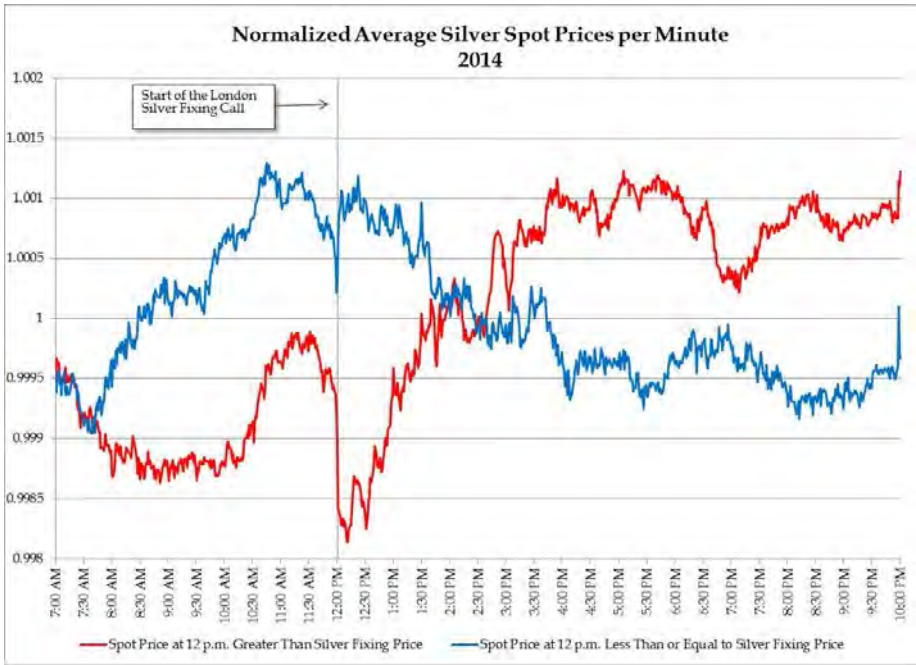
**FIGURE 24****FIGURE 25**



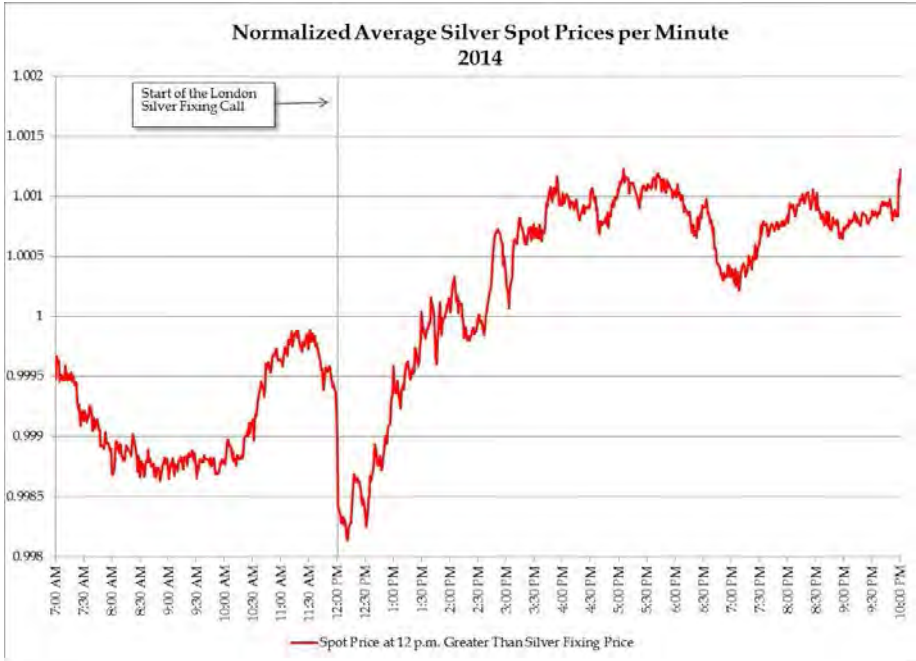
**FIGURE 26****FIGURE 27**

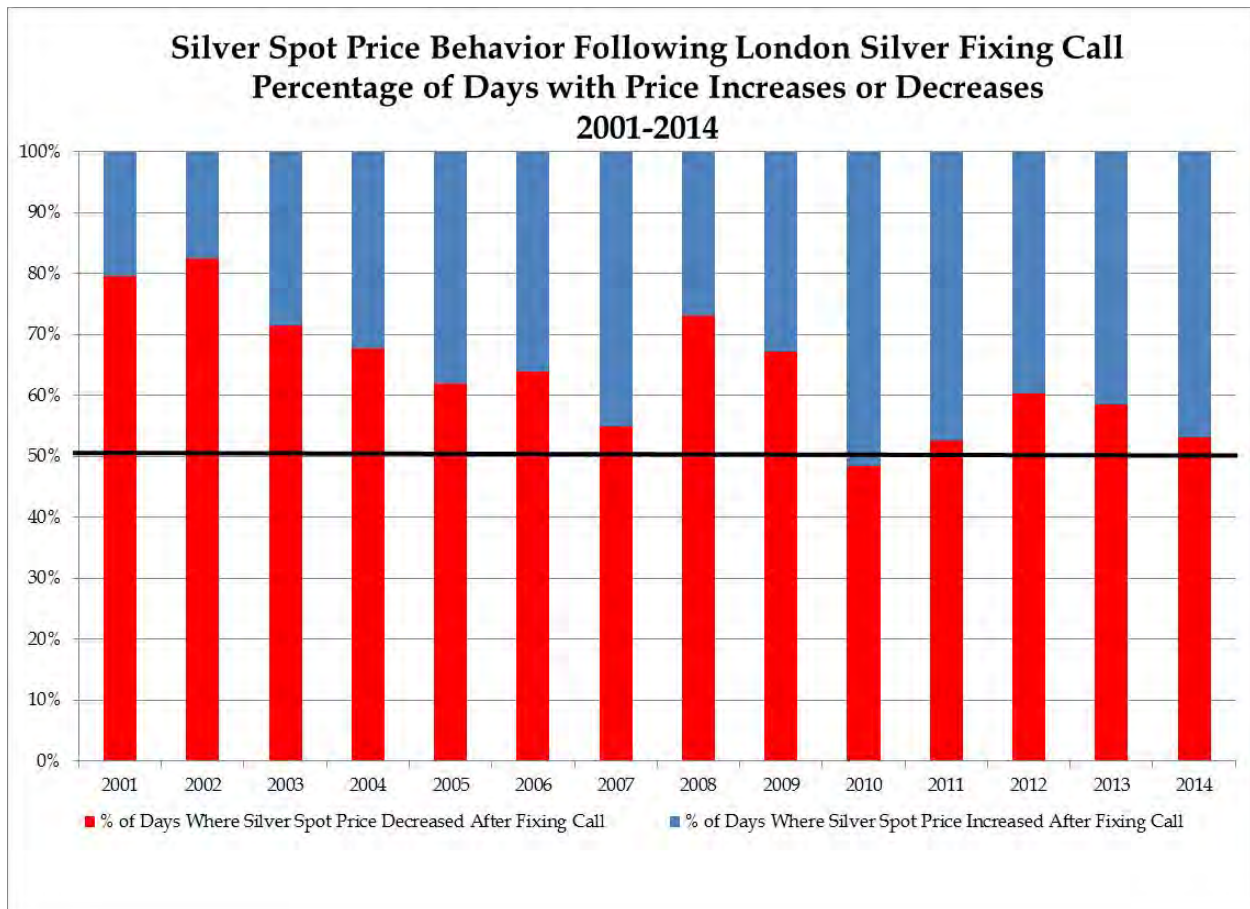
**FIGURE 28****FIGURE 29**

**FIGURE 30**



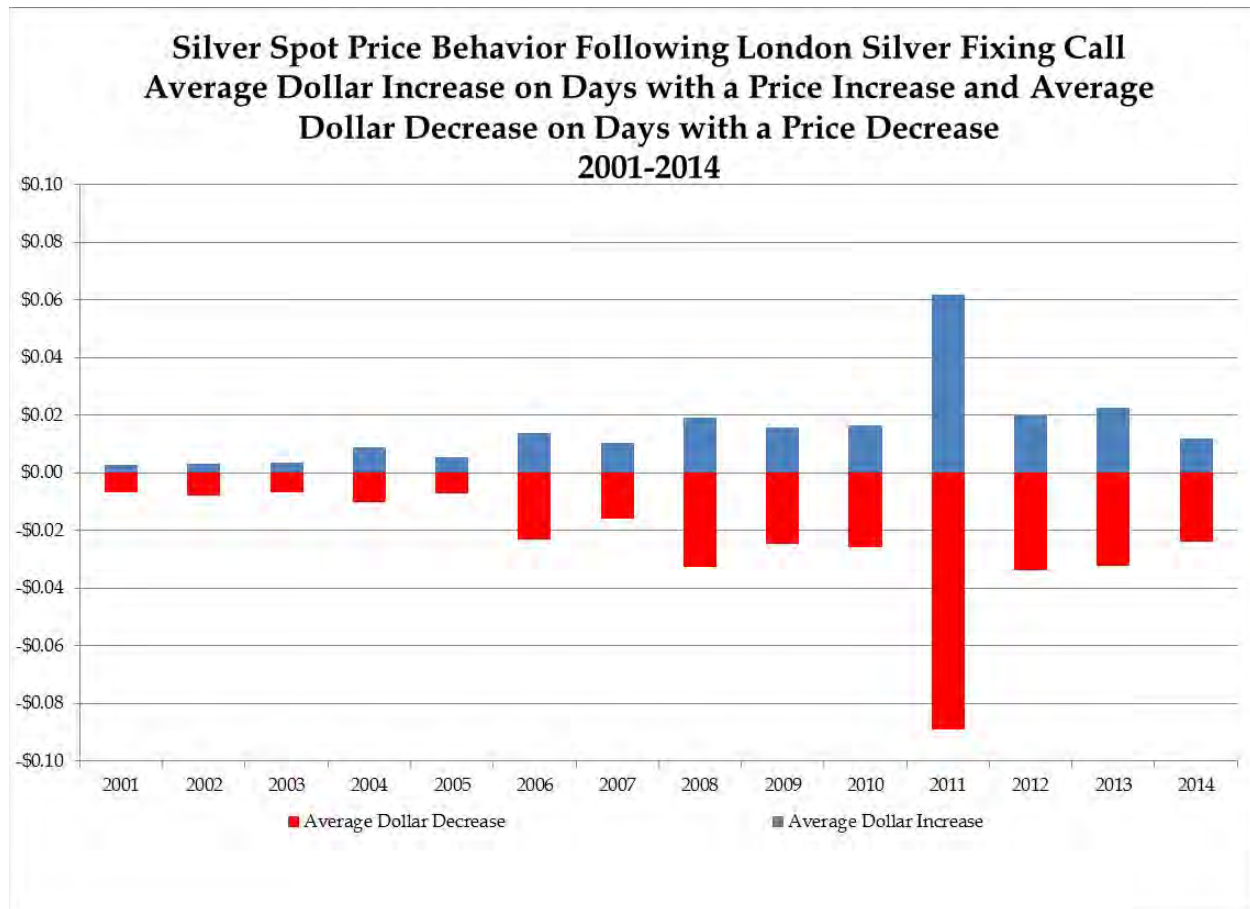
**FIGURE 31**



**FIGURE 32**

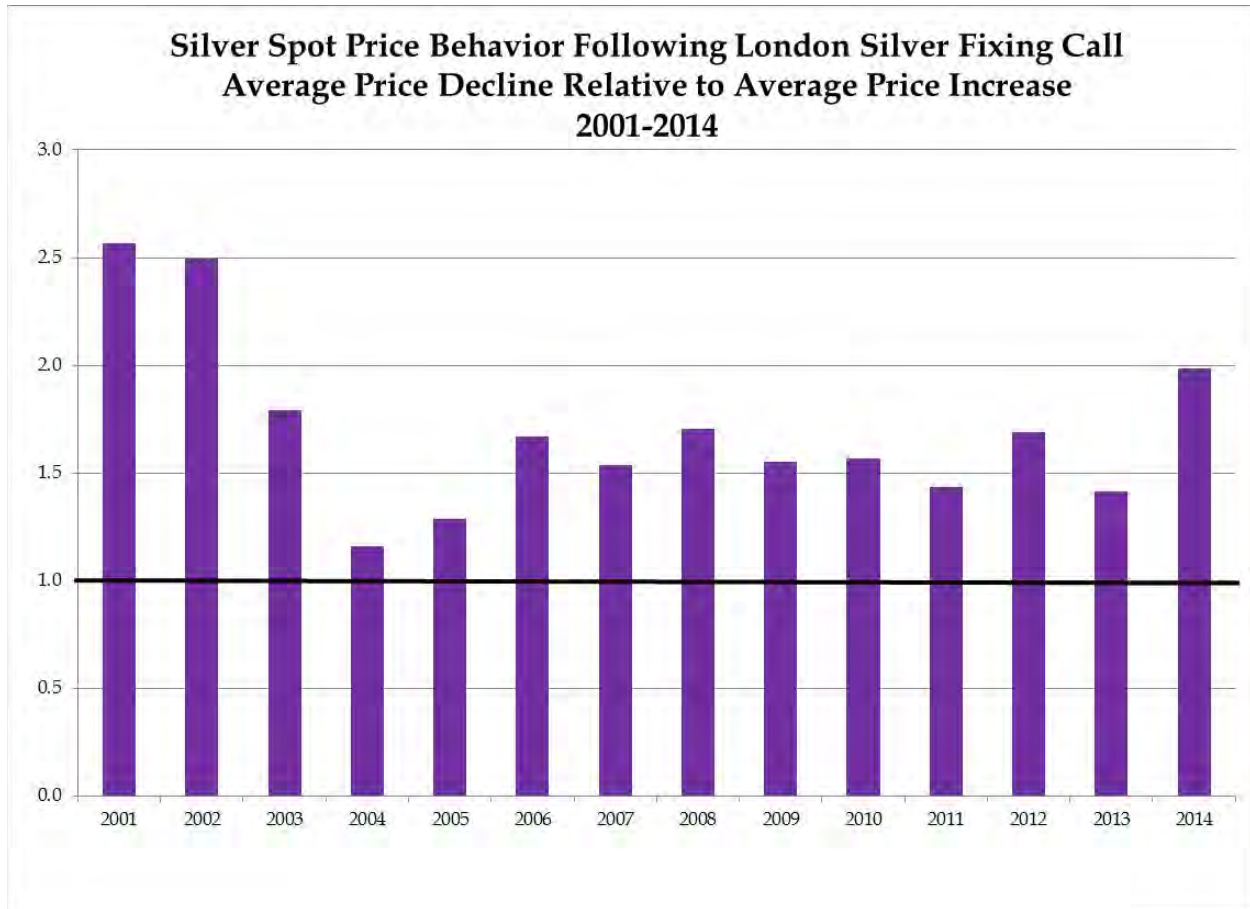
165. Professor Abrantes-Metz further analyzed whether the apparent suppression of silver prices persisted beyond the few minutes of a few days where abnormally large price movements were identified. For this analysis, she calculated how often in any given year the silver spot price at 12:00 P.M. London time was greater than the Fix released a few minutes later, indicating that silver prices declined during the Fix.

166. In a normal market, silver prices should exhibit a “random walk” over short intervals, with prices increasing 50% of the time and decreasing 50% of the time, around the start of the Silver Fix. Figure 32 displays the behavior of spot market silver prices following the Silver Fix during each year from 2001 through 2014. In every year except for 2010, the percentage of days where the price of silver decreases during the call is significantly larger, at times reaching 60%, 70% or even 80% of the days during that year.

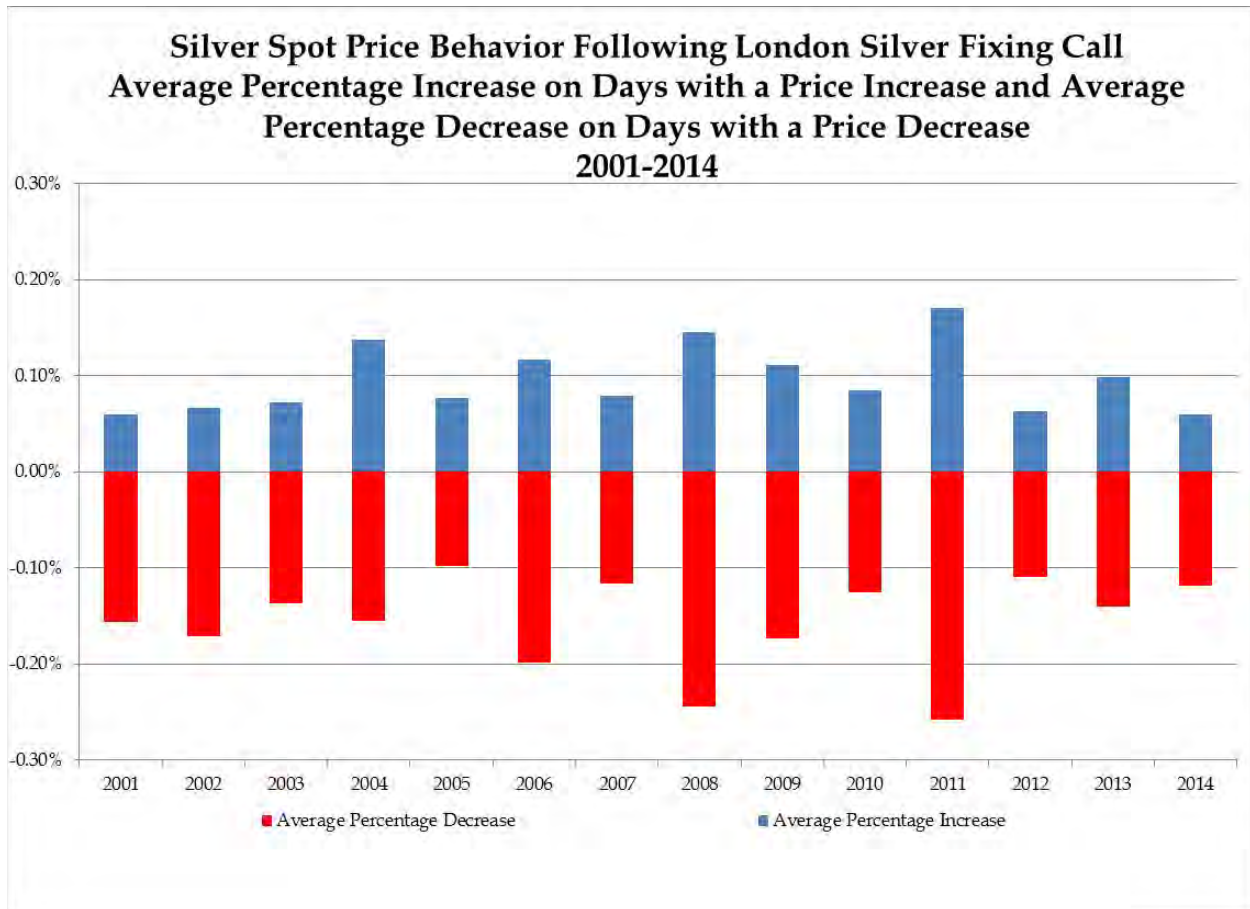
**FIGURE 33**

167. Figure 33 displays the average dollar increase in price and average dollar decrease in price over the same set of days analyzed in Figure 32. This chart shows that in absolute dollar terms, the size of the price decreases are on average significantly larger than the size of the price increases. Putting Figures 32 and 33 together, price decreases around the Silver Fix are not only more likely than price increases but of greater size when they occur.

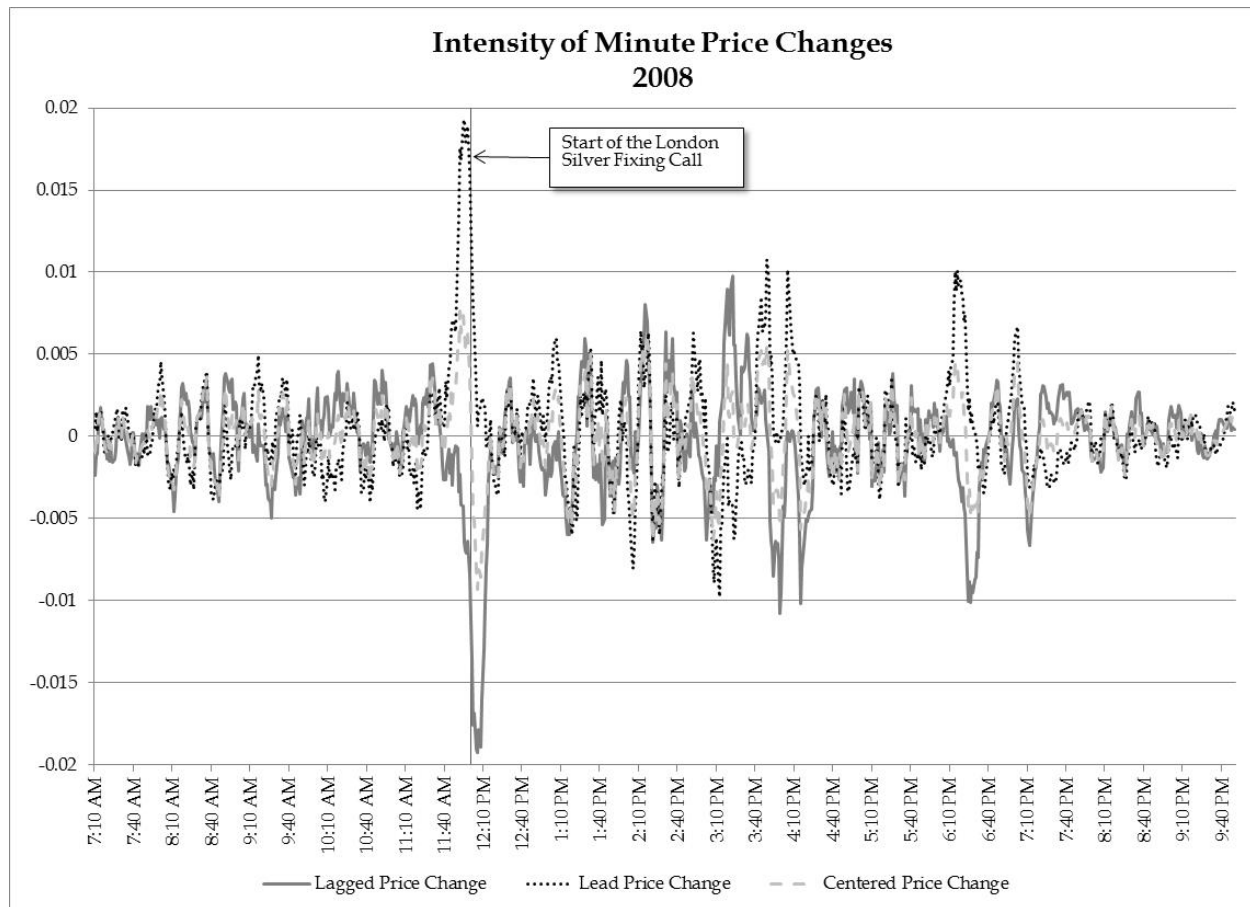


**FIGURE 34**

169. Figure 34 demonstrates the difference in size between the price increases and price decreases around the Silver Fix. In some years, like 2001 and 2002, the size of the price decreases are 2.5 times larger than the size of the price increases when they occur. More recently, from January 1, 2014, through July 31, 2014, the average drop in price has been approximately 2 times larger than corresponding price increases. For the remaining years, on average, the size of price decreases around the Silver Fixing have been 1.5 times larger when they occur than corresponding price increases.

**FIGURE 35**

170. Figure 35 further highlights the asymmetry between price increases and decreases around the Silver Fixing by showing that not only is the absolute dollar change larger, as indicated in Figure 33 above, but so is the percentage change in price. Figure 35 demonstrates that the red bars, which show the percent decrease in silver prices, are significantly larger during most years than the blue bars, which represent the percentage price increase. This is consistent with the Figure 35 above, displaying the ratio of the size of price decreases to price increases around the Silver Fix.

**FIGURE 36**

171. To understand just how much price changes around the Silver Fix differ from the rest of the day, Figure 36 displays the magnitude of the change in spot market silver prices across every minute of the day between 7:00 A.M. and 10:00 P.M London time during 2008. The change in price is calculated by comparing the price of silver at each minute to the price 10 minutes before (the “lagged price change”), 10 minutes after (the “lead price change”) and the average of the price at those two times (the “centered price change”). The result is a series of spikes, like those displayed in Figure 36, representing the intensity, *i.e.*, magnitude, of the change in silver prices over time. If the price at a given minute is very different from the price 10 minutes before or 10 minutes after, that difference will be represented by a large spike. Smaller differences will create a smaller spikes.



172. Large price spikes, specifically around the start of the Silver Fix, are highly suggestive of manipulation. For example, assume that the normal, unmanipulated price of silver on a given day is \$20 per ounce but the Silver Fix produces an artificially lower price of \$15 per ounce. The lagged price, *i.e.*, 10 minutes prior to start of the Silver Fixing, should be roughly \$20 per ounce. Once the Silver Fix starts (or shortly thereafter) the price of silver should drop in response to the artificially lower \$15 per ounce Fixing. After the Silver Fix is over, the price of silver should start to recover, moving the leading price, *i.e.*, 10 minutes in the future, gradually closer to the unmanipulated \$20 per ounce. In this example, prior to the start of the Silver Fix the price of silver at each minute should not be that different from the lagging and leading price, producing price changes of a lower intensity. Once the Silver Fix starts, the \$5 price drop to \$15 per ounce would appear unusual when compared to the lagging and leading prices. This large change in price would produce a high intensity price change and a large spike on the graph.

173. Figure 36 shows a large spike around 12:00 P.M. London time, coincident with the start of the Silver Fix. As explained above, this high intensity price change is highly suggestive of manipulation. However, 2008 is not the only year where the intensity of price changes around the Fix were significantly larger than the rest of the day. Beginning in 2004, the intensity of price changes around the Silver Fix became increasingly larger. By 2008, which is displayed in Figure 36, the intensity of the change in price around the Silver Fixing is the largest of the day, so large in fact that it dwarfs the intensity of price changes occurring when COMEX opens in New York at 1:30 P.M. London time. This dramatic spike in intensity before the broader market opens is statically significant and not the result of random market noise. Examples for additional years displaying similar activity are attached to this complaint as Appendix A.

**B. Expert Analysis Has Identified Anomalous Silver Pricing Behavior at the Time of the Silver Fixing**

174. Plaintiffs have also retained Andrew Caminschi, a researcher at the University of Western Australia, who is an expert in the Silver Fixing and the markets for silver and silver financial instruments. Mr. Caminschi analyzed intraday price quotes for spot market silver, Bloomberg ticker symbol “XAG,” and the trade and quote data for COMEX silver futures contracts, Bloomberg ticker symbol “SI,” between January 1, 2000 and December 31, 2013.<sup>110</sup>

175. Mr. Caminschi’s analysis uncovered anomalous pricing behavior around the time of the Silver Fixing that was consistent with a systemic suppression of silver prices.

176. This anomalous pricing behavior was accompanied by market activity in both the COMEX silver futures market and spot market for physical silver, demonstrating that information regarding the outcome of the Silver Fixing was being “leaked” to the market prior to the end of the daily conference call.

177. This information leakage, which manifests itself in the form of abnormally large spikes in both trading volume and price volatility in the minutes immediately following the start of the Silver Fixing, created a significant advantage to “informed traders,” those with knowledge of the Fix, compared to uninformed market participants.

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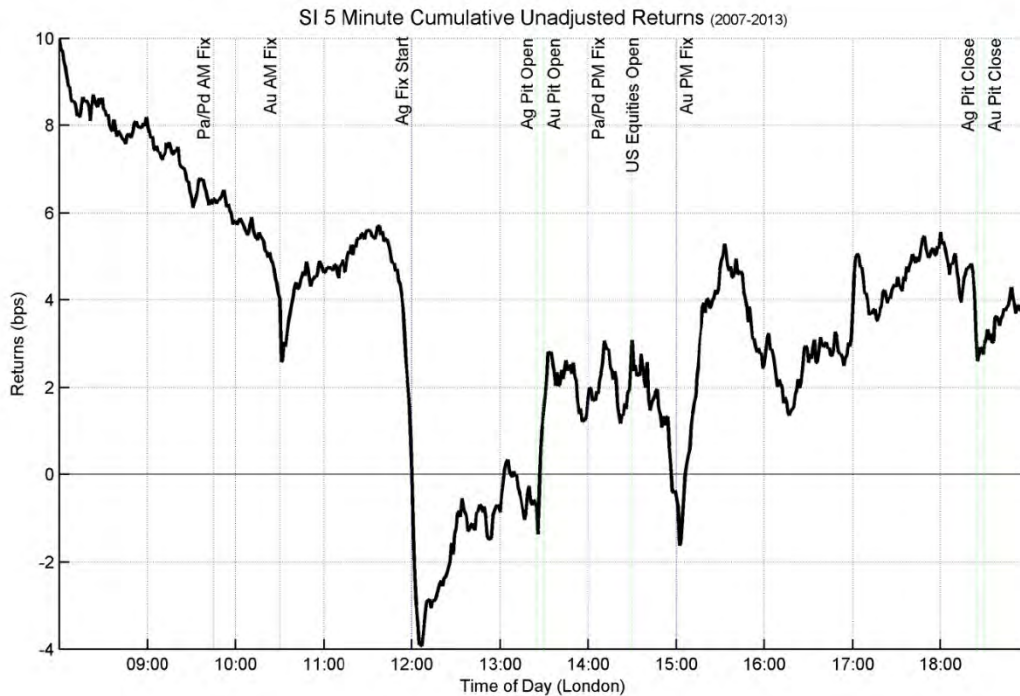
<sup>110</sup> See Caminschi, *Silver Linings*, *supra* note 15

# 1. Silver Prices Consistently Decrease Around the Start of the Silver Fixing

178. To understand just how much the pricing dynamics around the Silver Fix differed from those in the broader market, one must first put silver prices during the Class Period in context. Figure 37 displays the spot market price of silver in U.S. dollars per ounce between January 1, 2014 and November 10, 2014. This chart represents the price of silver during the Class Period. Noticeably, on January 1, 2005, silver begins a historic bull run, increasing in price from \$6.78 per ounce to \$48.44 per ounce on April 28, 2011.



**FIGURE 37**



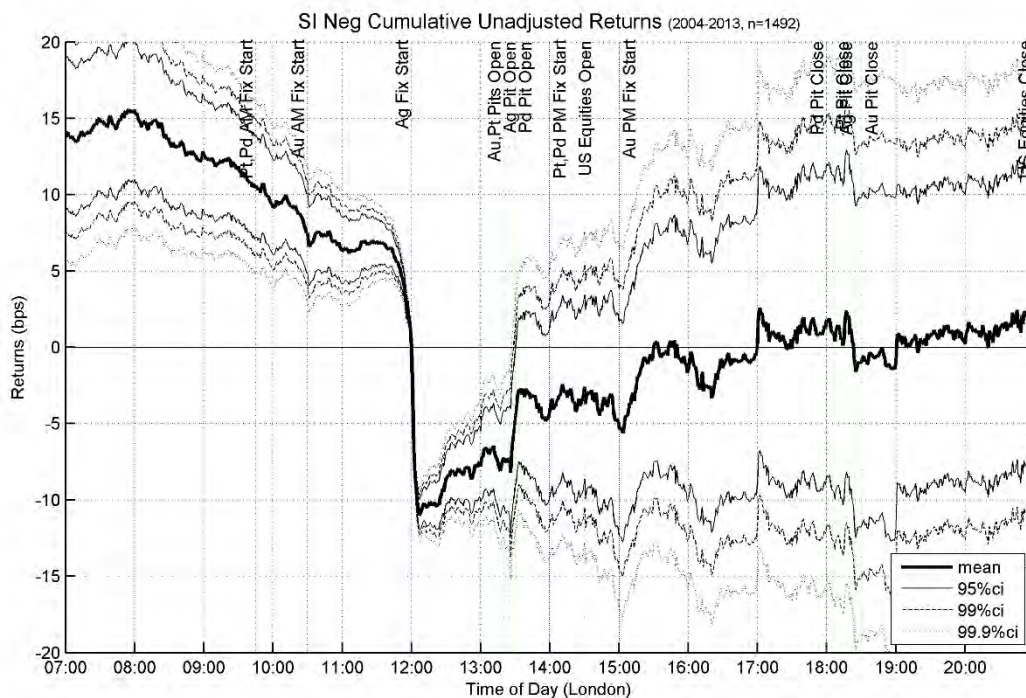
**FIGURE 38**

179. By contrast, during the same time period that the price of silver was consistently increasing, the Silver Fix was consistently inducing a decrease in price. The net effect of this drop can be seen in Figure 38, which displays the cumulative unadjusted returns for COMEX silver futures contracts between January 1, 2007 and December 31, 2013. Unadjusted returns measure the impact on silver prices by determining the price increase or decrease for a long position over a specified length of time. Thus, a decrease in unadjusted returns for COMEX silver futures contracts represents a decrease in price. As such, the cumulative unadjusted returns represent a nominal intraday price level referenced to a specific day. For Figure 38, this reference time is 12:00 P.M. London time, immediately prior to the start of the Silver Fixing.

180. Figure 38 demonstrates that the intraday price level of COMEX silver futures contracts begins to decrease just prior to the start of the Silver Fixing and reaches on average the

lowest level of the day, about 10 basis points lower, just a few minutes after the start of the Silver Fixing. This statistically significant price drop is highly suspect given that it occurs at a time when silver prices were generally increasing, representing a clear break from the uptrend visible in the broader public silver market.

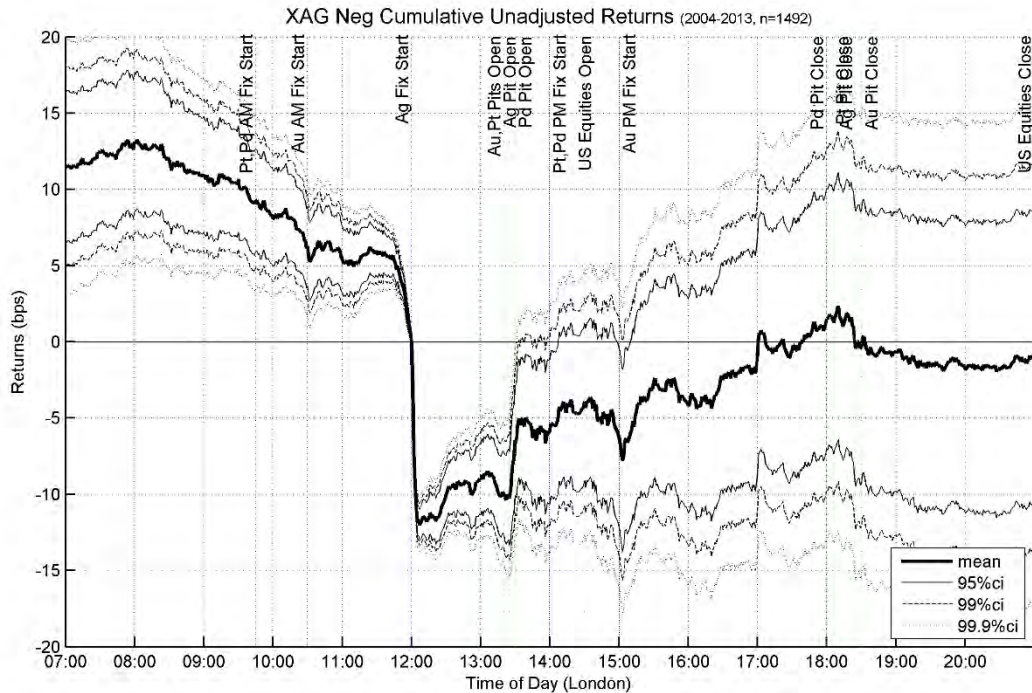
181. However, due to cancellation effects that result from combining days with positive and negative returns into a single chart, Figure 38 understates the true impact of the Fix. To better assess this price impact, the cumulative unadjusted returns on days where the price of silver decreased during the Fix (“Down Days”) is separated from those where the price of silver increased during the Fix (“Up Days”). This bifurcated comparison removes the cancellation effects and reveals the true price impact of the Down Days.



**FIGURE 39**

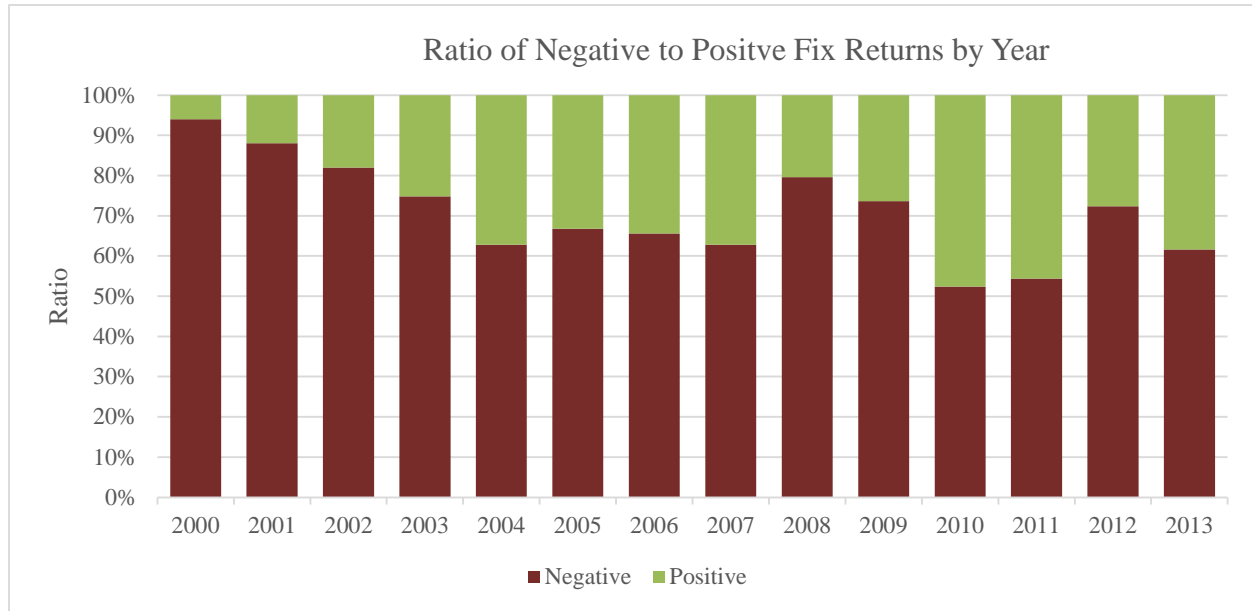
182. Figure 39 (above) displays the cumulative unadjusted returns observed in the COMEX silver futures market between 7:00 A.M. and 8:00 P.M. London time on Down Days occurring between 2004 and 2013. Figure 39 demonstrates that on Down Days falling within the Class Period, the price of silver drops more than 15 basis points before the start of the Silver Fix, substantially more than the net result of including both Up and Down Days in Figure 38.

183. Figure 39 also shows that this large price drop has a lasting impact on the prices of COMEX silver futures contracts that extends well beyond the end of the Silver Fix. Following the solid black line, which indicates the mean cumulative unadjusted returns throughout the day, the price of silver on Down Days *does not* recover fully from the drop that occurs at the start of the Silver Fix during the London trading day and most of the U.S. trading day. Even at the 99.9% confidence interval, the prices of COMEX silver futures contracts do not return to pre-Fix levels by the end of the day, beginning the next day artificially lower.

**FIGURE 40**

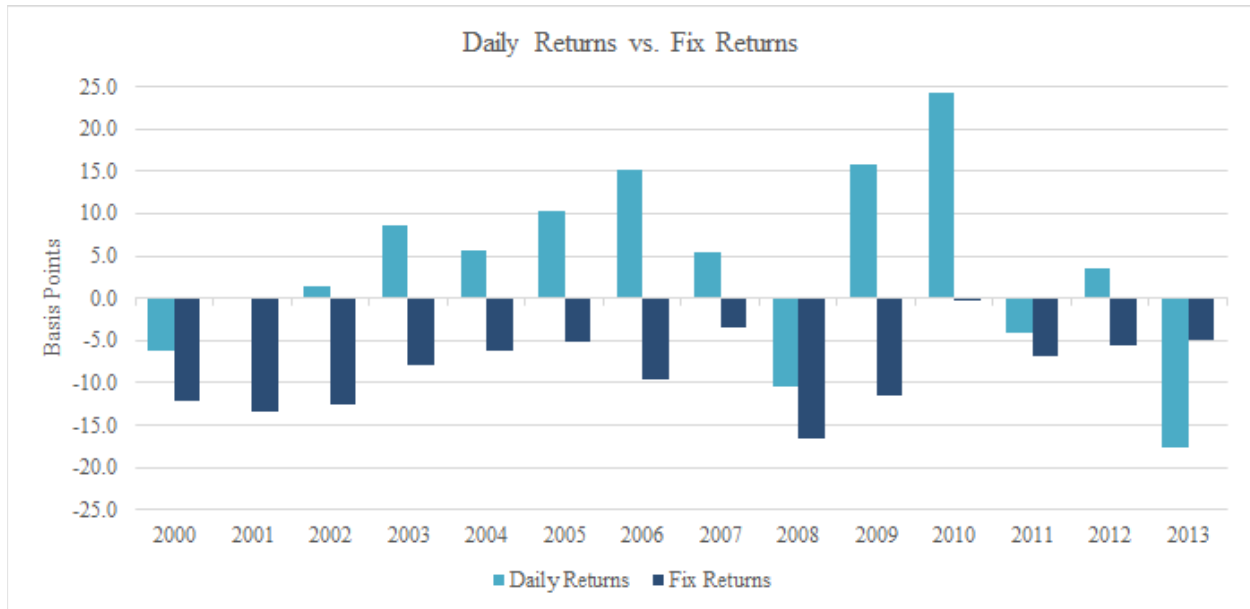
184. The same is true for silver prices in the spot market. Figure 40 shows the price of spot market silver between 7:00 A.M. and 8:00 P.M. London time on Down Days between 2004 and 2013. As observed in the COMEX silver futures market, the price drop around the start of the Silver Fix is more than 15 basis points, substantially larger than the net change in price displayed in Figure 38 above. Similar to the COMEX silver futures market, the impact of this price drop is felt long after the end of the Silver Fixing, as the spot market price of silver *never* recovers to pre-Fix levels even at the 99.9% confidence interval.

185. Together Figures 39 and 40 demonstrate that the Silver Fix has a persistent (and cumulative) impact on the price of silver. As displayed in both figures, the prices of COMEX silver futures contracts and physical silver do not recover from the price drops induced by the Silver Fix on Down Days, beginning the next trading day lower. As a result, the Silver Fix affects the prices of silver and silver financial instruments well beyond its public release.

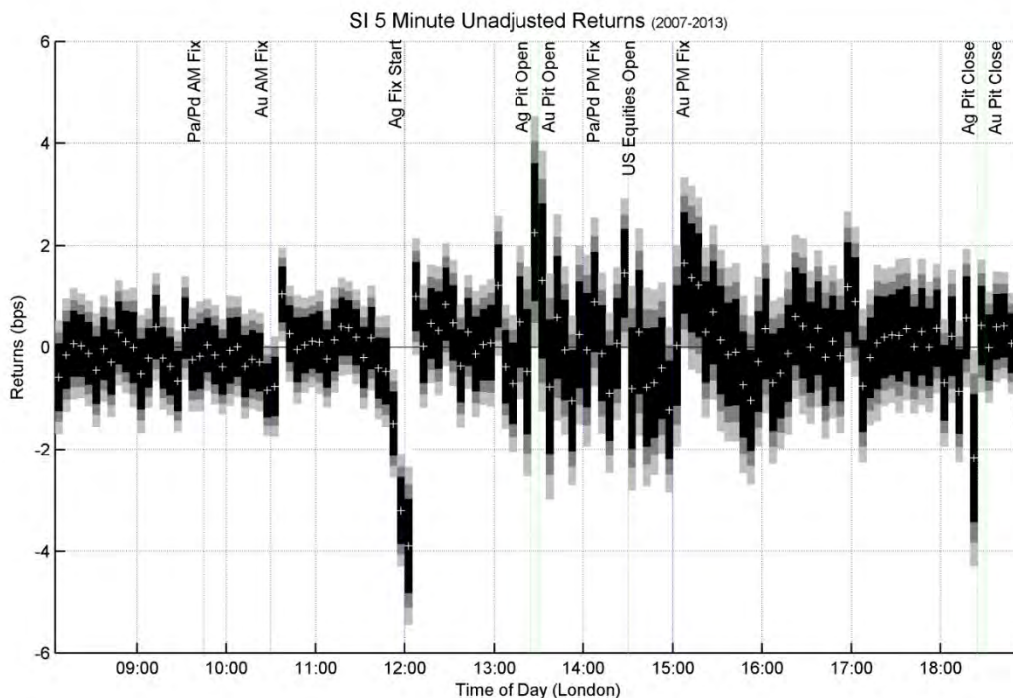
**FIGURE 41**

186. This disconnect, between the price of silver during the Silver Fix and prices in the broader public market is highlighted by the frequency with which silver prices decrease around the start of the Silver Fix. Figure 41 displays the proportion of days with negative returns, *i.e.*, price decreases, to those with positive returns, *i.e.*, price increases, observed during the Fix. Figure 41 demonstrates that during every year, even during silver's bull run, *e.g.*, 2005 to 2011, there are more days where the price of silver decreases during the Silver Fix than there are days where the price increases. Often, the number of down days outnumber the number of up days 2 to 1. That is, the price dynamics of the Silver Fix did not reflect those of the broader silver market.



**FIGURE 42**

188. This results in significantly different returns during the Silver Fix than observed across the trading day. Figure 42 compares the average daily returns for spot market silver to the returns during the Silver Fix. Significantly, between 2002 and 2010, including while silver was on a bull run, during every year except for 2008, the average Silver Fix returns were negative, representing a decrease in price, while the average daily returns in the broader public market were positive, demonstrating an increase in price. Figure 42 underscores how divergent the Silver Fix price dynamics are in comparison to the broader public silver markets during the Class Period.

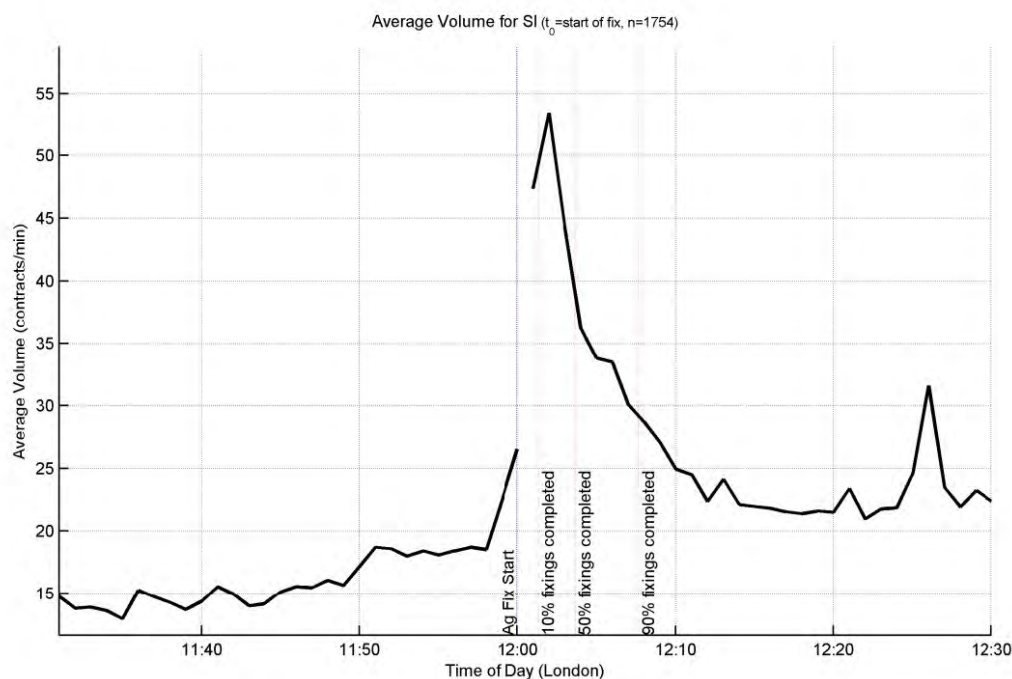


**FIGURE 43**

190. The negative returns generated during the Silver Fix are highly statistically significant, and cannot be attributed to general market noise. Figure 43 measures the statistical significance of unadjusted returns in the COMEX silver market, between January 1, 2007 and December 31, 2013, at the 95%, 99%, and 99.9% confidence interval. Figure 43 demonstrates that there is a statistically significant cluster of negative returns in the minutes prior to the start of the Silver Fix. Nowhere else during the day is there such a concentration of negative returns.

191. This also represents a significant change in intraday silver pricing behavior. Prior to the start of the Fix, the unadjusted returns occupy a +/-4 basis point wide band, centered on 0 basis points, ranging from +2 basis points to -2 basis point. In the 10 minutes leading up to the start of the Fix, the unadjusted returns breakout from this band, with subsequent 5 minute intervals drops. All of these are outside of the 99.9% confidence band, indicating these are not random occurrences.

**2. Anomalous Spikes in Both Trading Volume and Price Volatility Following the Start of the Silver Fixing Demonstrate Information Leaking to the Market**

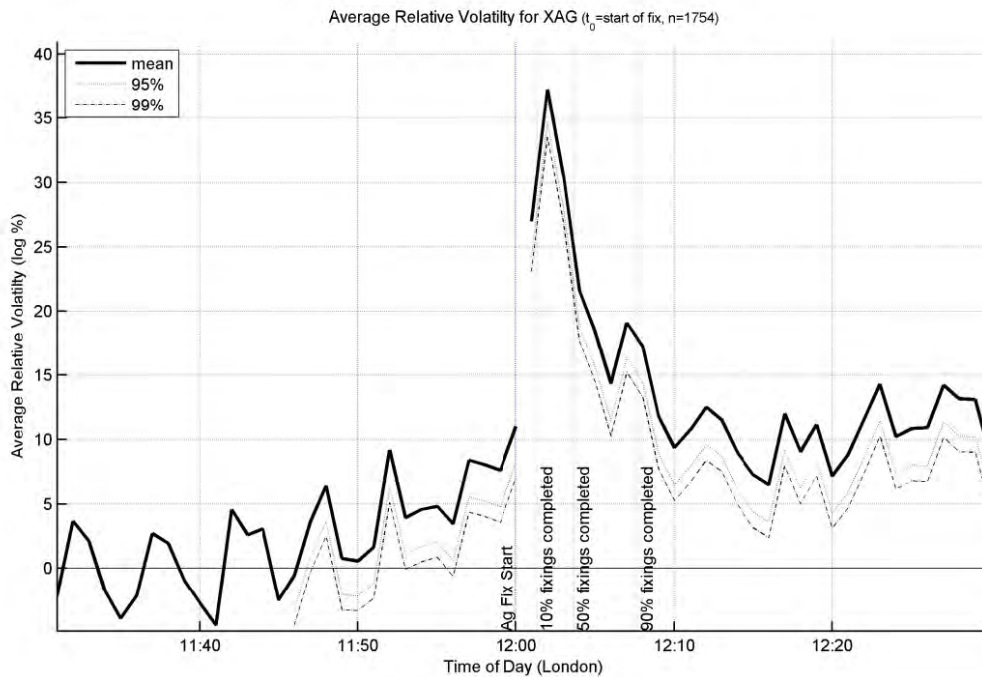


**FIGURE 44**

192. Figure 44 shows the average volume of COMEX silver futures contracts traded during 11:30 A.M. and 12:30 P.M London time between January 1, 2007 and December 31, 2013. This chart shows the trading volume beginning to increase just prior to the start of the Silver Fix and spiking at 12:02 P.M. London time. Trading volume during this period increases more than threefold, from around 15 contracts per minute before the start of the Fixing to over 50 contracts per minute just 2 minutes after it starts.

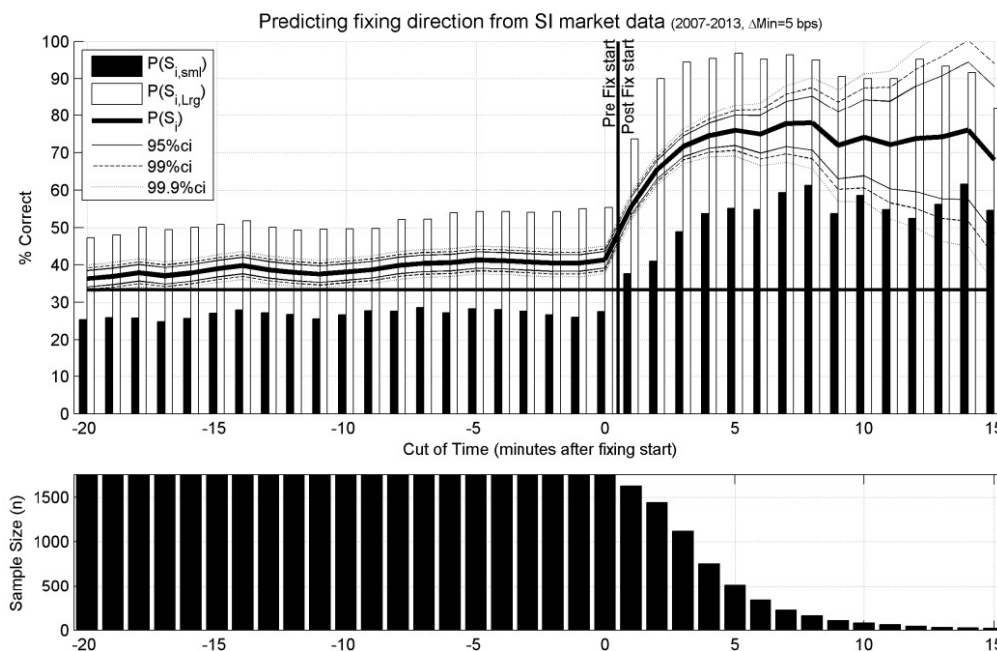
193. Because the average length of the Silver Fix is around 4 minutes, in almost all cases, this spike in volume occurs before the Fix ends. The percentage of fixings completed relative to the spike in trading volume is indicated in Figure 44 with a series of vertical red lines. The observed spike in volume occurs after roughly 10% of the fixings have completed. This behavior is highly unusual since typically, trading volume increases in response to new

information, *e.g.*, the result of the Silver Fix. This premature spike in volume indicative of information leaking from inside the Silver Fix to the public market as the Fixing Participants trade on results of the Fix before it is released to the public.



**FIGURE 45**

194. Similar results are seen in changes in the silver spot market. Figure 45 displays the average relative price volatility in silver spot market between 11:30 A.M. and 12:30 P.M. London time from January 1, 2007 through December 31, 2013. Like increase in trading volume seen in the COMEX silver futures market, price volatility in the silver spot market peaks just 2 minutes after the start of the Silver Fix, escalating by close to 40%, while almost 90% of the fixings are still in progress, their results are not yet public. Volatility spikes are also markers of new information arriving to the market. As a result, an increase in volatility prior to the end of the Fix is most plausibly explained by information leaking into the market as the Fixing Members act on the results of the Fix prior to its publication.

**FIGURE 46**

195. In addition to these unexpected spikes in volume and volatility, the returns around the start of the Fix also consistently predict the Fix direction. Figure 46 contains two charts demonstrating the predictive power of trades placed in the COMEX silver futures market during the 20 minutes before (-20 to 0) and 15 minutes after (0 to 15) the start of the Silver Fix between January 1, 2007, and December 31, 2013.

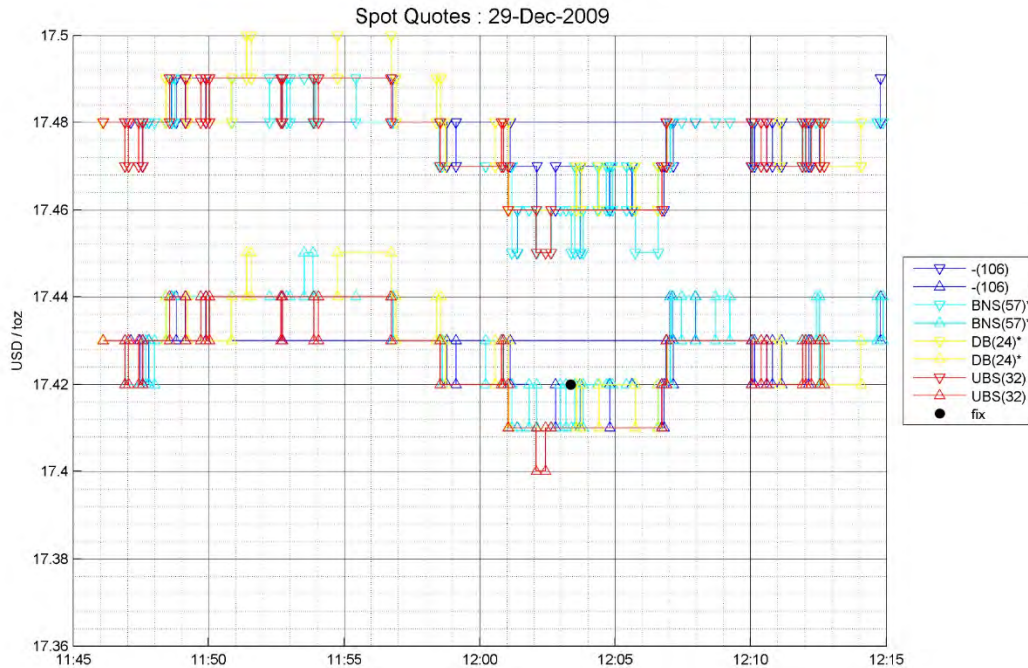
196. The top chart represents the percentage of Silver Fixings for which the price direction (*i.e.*, higher or lower than the price of silver before the start of the Silver Fix) was correctly predicted by the market price direction (*i.e.*, increasing or decreasing) during the specified time interval. The solid black line displays the total percentage of Silver Fixings, still ongoing at that time, where the Fix direction was correctly predicted by the market price direction. The black and white vertical bars represent the percentage of correct predictions for the two subsets of Fixes, those where the fix price movements were “small,” and those where the absolute returns were “large.”

197. The lower chart in Figure 46 shows the number of Silver Fixings included in the analysis at each time interval. Significantly, the analysis in Figure 46 only measures the ability of market direction to predict the results of those Silver Fixings which are still ongoing at each point in time, *i.e.*, prior to the information release, since one would expect trades placed after the end of the Fix to reflect the price released to the market. With the average length of the Silver Fixing around 4 minutes, the bottom chart in Figure 46 reflects the significant drop off in the number of ongoing Fixes during each of the 15 minutes following the start of the Fix.

198. Figure 46 shows that trades placed just after the start of the Silver Fix, but before the results are released to the public, are highly predictive of the Fix direction. During the 20 minutes prior to the start of the Silver Fix, market activity has a limited predictive value, correctly predicting the price direction of the Fix about 40% of the time. However, once the Fix starts, trades in the minutes before the Fix is released to the public are highly predictive of the Fix direction, reaching a peak of 83.6% accuracy seven minutes after the start of the Silver Fix.

199. The predictive value increases even further when there are large returns, *i.e.*, more than 5 basis points on average, to be gained by trading in advance of the public release of the Fix. The white vertical bars in Figure 46 report the ability of market activity to predict the results of Silver Fixings that generate these large returns and demonstrate more than 90% accuracy for trades placed during the 2 to 7 minute intervals, reaching 96.9% accuracy during minute 5.

200. Figure 46 also shows that trades in the opening 5 minutes of the Fixing are highly informative as to the ultimate Fix direction. Further the more economic gains to be had, *i.e.*, the larger the returns, the better the trades are at predicting the final outcome of the Fix.

**FIGURE 47**

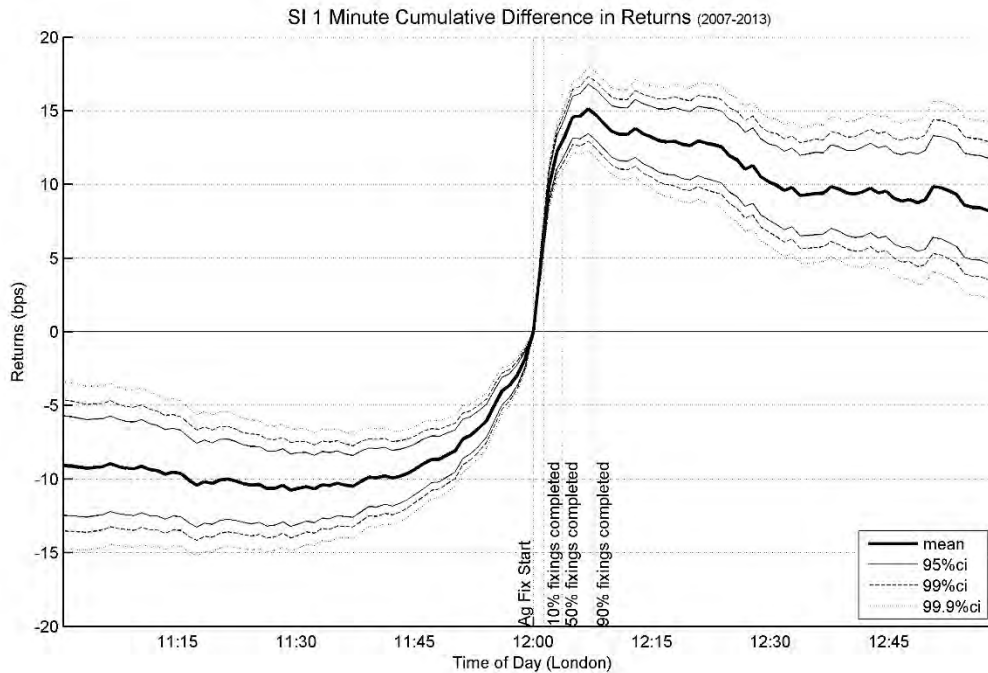
201. Fix price quotes in the silver spot market also exhibit similar predictive power. Figure 46 displays bid and ask quotes in the silver spot market between 11:45 A.M. and 12:15 P.M. London time on December 29, 2009. During this time period, Defendants Bank of Nova Scotia (“BNS”), Deutsche Bank (DB”), and UBS, are both quoting prices in the silver spot market. For more than two minutes prior to the release of the Fix, as indicated by the solid black dot, Deutsche and Bank of Nova Scotia quotes silver prices at the Fix level, and UBS quotes lower. This is indicative of the same kind of information leaking into the public market through the Fixing Members activity in advance of the public release of the Fix.

**3. Informed Traders with Knowledge of the Fix Benefit Financially by Taking Advantage of the Observed Pricing Anomalies**

202. The pricing anomalies described above provide “informed traders” who have knowledge of the Fix price direction with a considerable advantage over “uninformed traders” who hold long positions in the COMEX silver futures and spot silver markets. The returns available to an informed trader are represented by what is known as “adjusted returns.” The adjusted returns take the unadjusted returns described earlier and impute knowledge of the Silver Fix direction, *i.e.*, whether the Fix will be higher or lower than the price of silver before the start of the daily fixing call. The adjusted returns available to these informed traders also represents the returns available to the Fixing Members and their co-conspirators, who gain knowledge of the Silver Fix price direction prior to its release to the public.

203. However, the true significance of the informational advantage enjoyed by an informed trader in the silver market is represented by the “difference in returns,” *i.e.*, the difference between the adjusted returns available to informed traders, with directional insight into the results of the Silver Fix, and the unadjusted returns of uninformed traders with no directional insight, holding uninformed long positions.

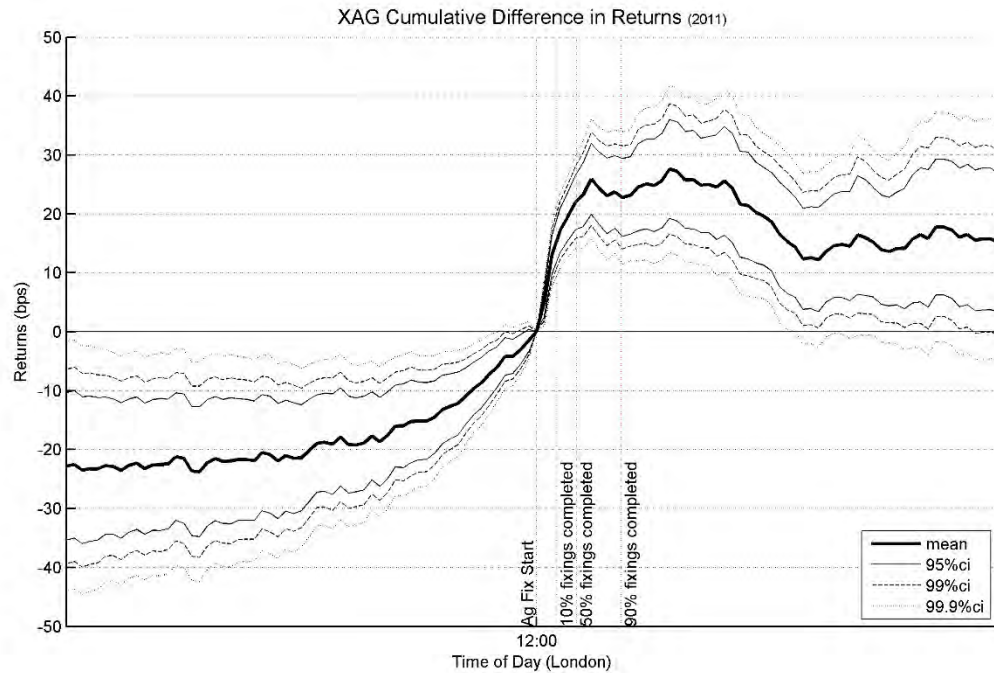




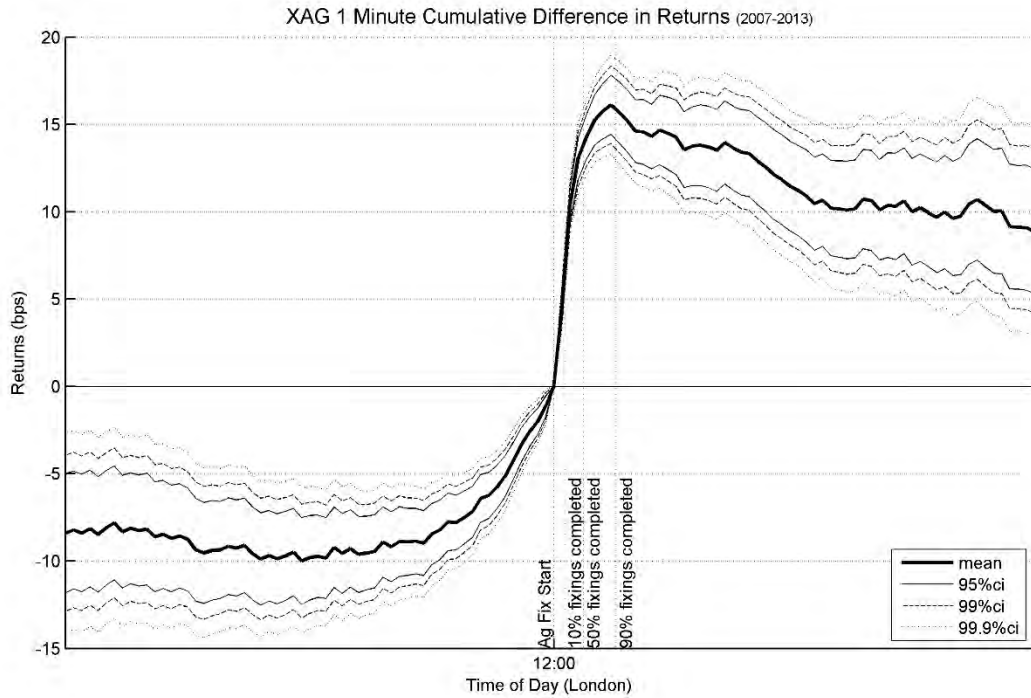
**FIGURE 48**

205. This informational advantage generates significant returns for informed traders in the COMEX silver futures market. Figure 48 displays the cumulative difference in returns experienced by an informed trader with direction insight into the results of the Fix and an uninformed trader with no direction insight, between 11:00 A.M. and 1:00 P.M. London time between January 1, 2007 and December 31, 2013.

206. As demonstrated by Figure 48, there are statistically significant advantages available to informed traders on either side of the Silver Fix. For example, an informed trader that initiates a position at 11:45 A.M., when the average returns are -10 basis points, and closes that position at 12:05 P.M., when returns are +15 basis points, captures the entire 25 basis point price move, a large advantage over an uninformed trader.

**FIGURE 49**

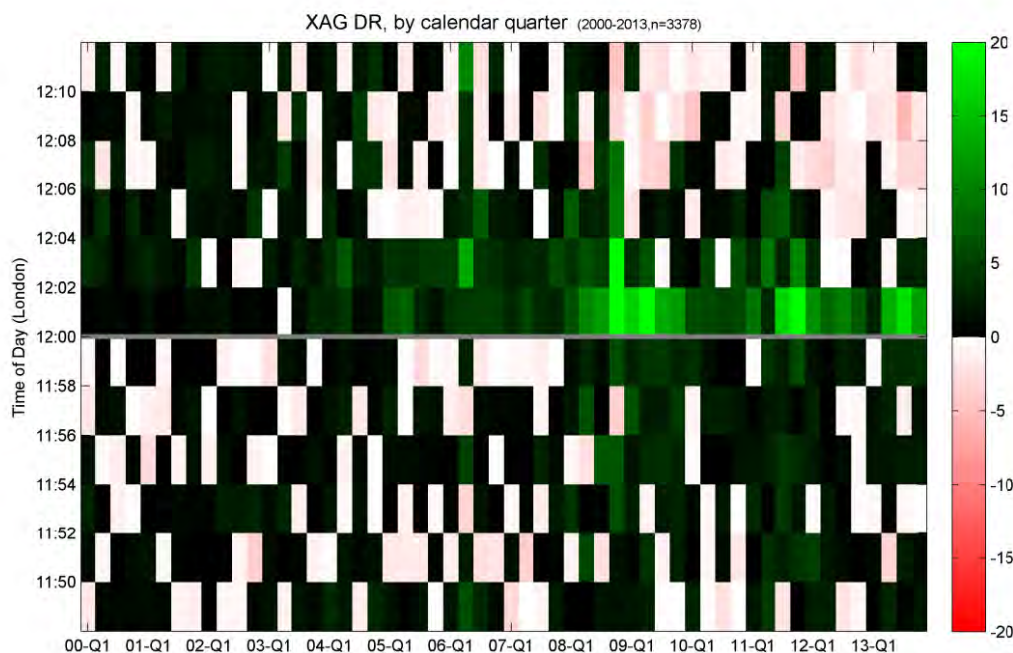
207. The same is true in the spot silver market. For example, Figure 49 displays the cumulative difference in returns observed in the spot silver market between 11:00 A.M. and 1:00 P.M. London time during 2011. Following the black line, which indicates the average difference in returns, Figure 49 shows that there are advantages on both sides of the Silver Fixing available to informed traders in the spot market. At its maximum, the informed trader has a more than 40 basis point advantage over the uninformed trader; slightly more than 20 basis points on either side of the Fix.



**FIGURE 50**

208. Figure 50 shows the cumulative difference in returns between January 1, 2007 and December 31, 2013, a broader time period than displayed in Figure 49. Figure 50 demonstrates that, between 2007 and 2013, informed traders in the physical silver market enjoyed an average 25 basis point advantage over uninformed traders, including Class Members. This mirrors the difference in returns available in the COMEX silver futures market during the same time period, which is displayed in Figure 48 above.

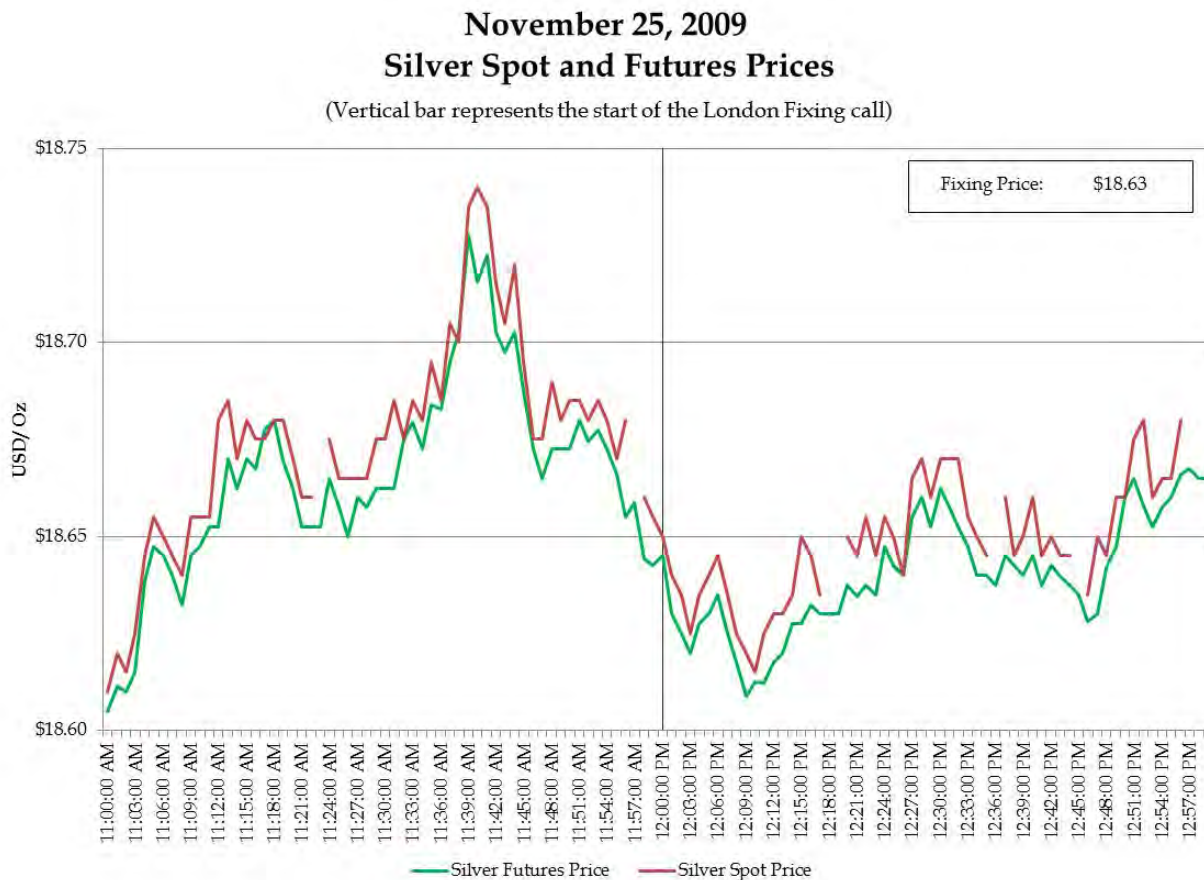
209. This advantage existed at other times during Class Period, beyond the time periods depicted in Figures 48 through 50. Between January 1, 2000 and December 31, 2013, informed traders, on average, had a 10 basis point advantage in the spot market and a 15 basis point advantage in the COMEX silver futures market, on every single trading day.

**FIGURE 51**

211. Comparing the returns generated by informed silver traders to those observed elsewhere puts the value of this advance directional insight in perspective. Between 2000 and 2013, the price of silver increased from \$5.14 to \$19.50 per ounce, a return of more than +4 basis points per day. Over the same period, the S&P 500 index returned even less, just 0.7 basis points per day. As demonstrated in Figures 48 and 49 above, an informed trader outperformed the uninformed trader by around 25 basis points per day in the COMEX silver futures market between 2007 and 2013 and at times more than 40 basis points per day in the spot market. By comparison, a return of 10 basis points per day results in an annual return of 28% per year, while a 40 basis point return, as observed in the spot market during 2011, amounts to a 172% annual return. Advance knowledge of the Fix direction allows informed traders to consistently generate these kinds of returns. Figure 51 shows the difference in returns for informed and uninformed traders, between 2000 and 2013, with color. Areas of positive returns are indicated with shades of green. Advance knowledge of the Fix direction allows informed traders to consistently

generate these kinds of returns.

212. Figure 51 shows the difference in returns for informed and uninformed traders, between 2000 and 2013, with color. Areas of positive returns are indicated with shades of green and areas of negative returns with shades of red. Noticeably, since 2000, the 2 minute window after the start of the Fix shows a positive return for informed traders during all but one of the 56 calendar quarters within that time range.

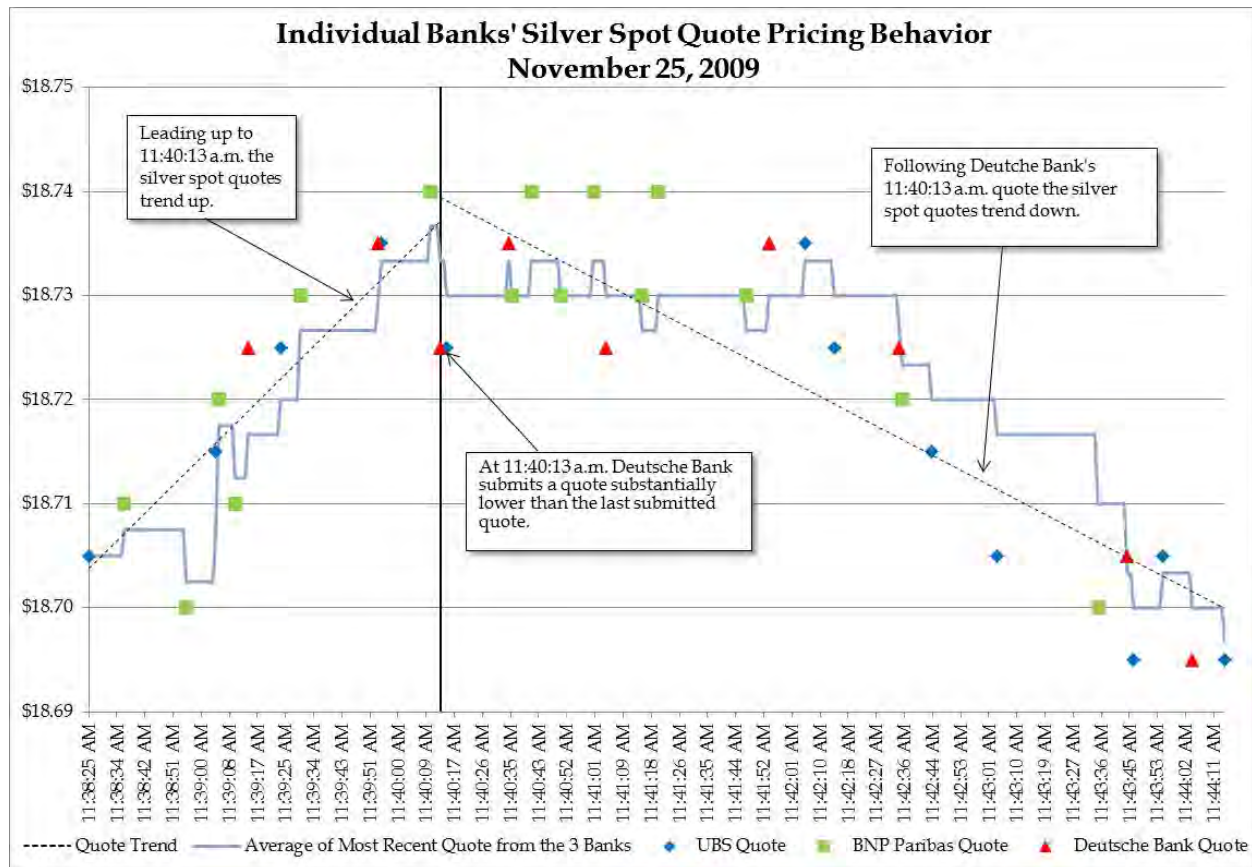


**FIGURE 52**

213. To demonstrate how Defendants use their spot market quotes to influence the price of silver and silver financial instruments, including COMEX silver futures, Plaintiffs' experts analyzed thousands of days where the price of silver decreased significantly around the Silver Fixing. Figure 52 displays the price of COMEX silver futures contracts and spot market



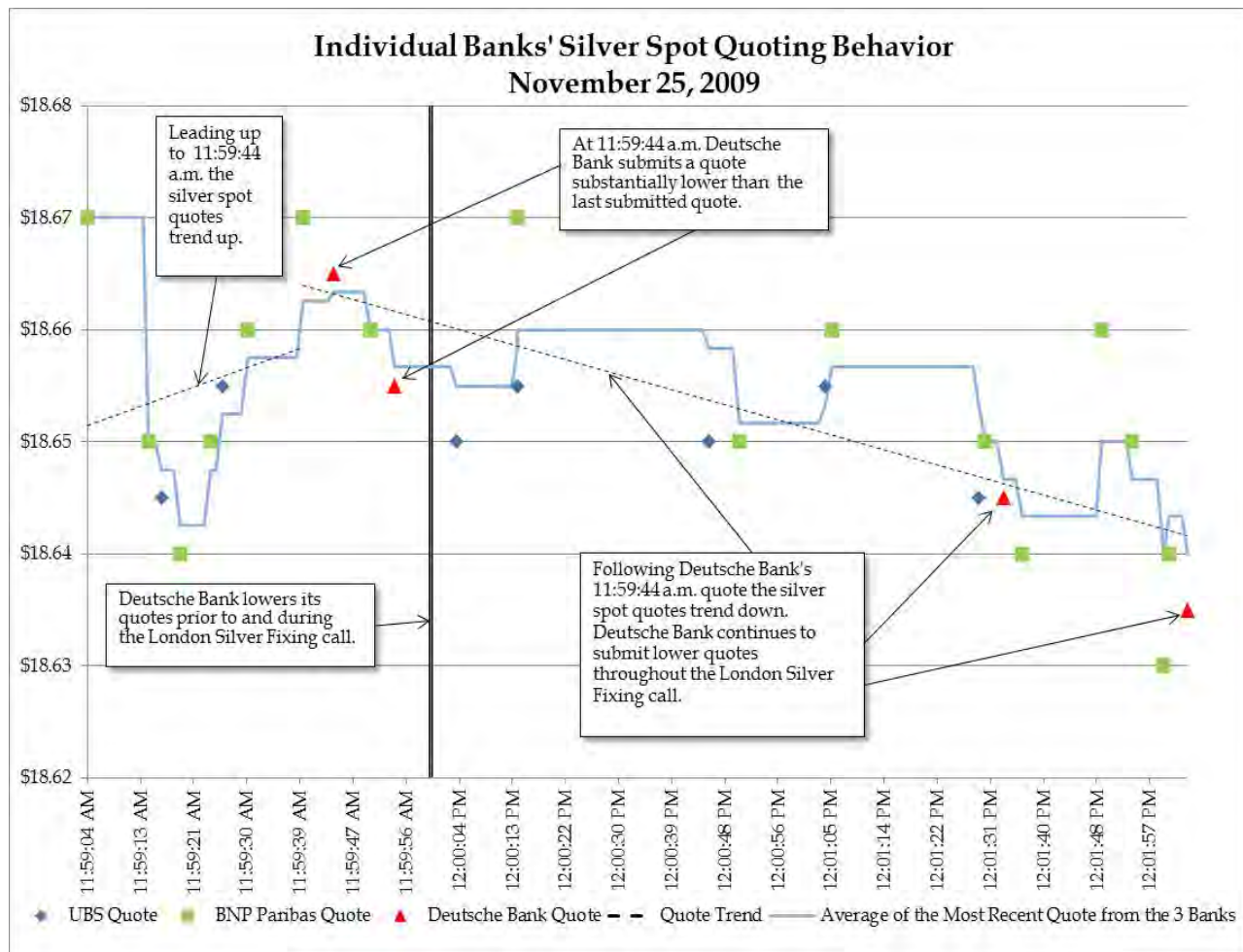
silver throughout the day on November 25, 2009, one of the days identified by Plaintiffs' experts. Additional examples, displaying the change in both spot silver prices and the prices of COMEX silver futures contracts are attached to the complaint as Appendix B. Figure 52 shows that on November 25, 2009 the price of COMEX silver futures contracts and spot market silver begin to decrease around 11:40 A.M. London time, roughly 20 minutes *before* the start of the Silver Fix.



**FIGURE 53**

214. Examining a narrower time range, Figure 53 shows the evolution of spot silver prices between 11:38 A.M. and 11:44 A.M. London time, on November 25, 2009. During this time period three banks, Defendant UBS, Defendant Deutsche, and BNP Paribas are actively quoting silver prices in the spot market around the time of the Silver Fix.

215. As shown in Figure 53, prior to 11:40:13 A.M., the price of silver in the spot market was increasing until, at 11:40:13 A.M. London time, Defendant Deutsche submits a price quote that is substantially lower than the prevailing quotes in the market at that time. Almost immediately, Defendant UBS, the blue diamond, drops its spot market quote to the same level as Deutsche. These lower price quotes by Defendants Deutsche and UBS coincide with a change in the trend of spot silver prices, which continues throughout the Silver Fixing.



**FIGURE 54**

216. Moving closer to the start of the Silver Fix, Figure 54 shows that Defendants Deutsche and UBS consistently submit price quotes that are lower than prevailing market prices, as represented by the quotes submitted by other market participants. For example, beginning at

11:59:44 A.M., Deutsche Bank submits a quote substantially lower than the last quote submitted by BNP Paribas, which starts a reversion in the spot market price trend. UBS follows suit, lowering its next price quote to \$18.65, lower than Deutsche, and significantly lower than the average market price.

217. Figure 54 shows that following Deutsche's price quote at 11:59:44 A.M., silver prices start moving downward into the beginning of the Silver Fix. Throughout the Fix, Deutsche and UBS continue to place quotes on the lower end of other contemporaneous price quotes in the market leading the price of silver consistently lower. For example, around 12:01:30 P.M., Deutsche and UBS both submit nearly identical price quotes that are lower than the average market price, indicated by the solid blue line, and the last quote by BNP Paribas.

**C. Computer Analysis of COMEX Silver Futures Market Data has Identified Activity Around the Silver Fix Consistent with Informed Trading and Collusion**

218. To further support this expert economic analysis Plaintiffs used proprietary software to analyze the time and sales or "tick" data for COMEX silver futures contracts during the period of 11:55 A.M. - 12:05 P.M. London time (the "Target Window") for each trading day between January 1, 2007 and August 14, 2014 (the "Analysis Period"). Plaintiffs selected this ten minute window because it includes trading activity during the Silver Fix, which begins at noon London time, but prior to the publication of the Silver Fixing's results to the general public, which occurs on average at 12:04 P.M. London time.

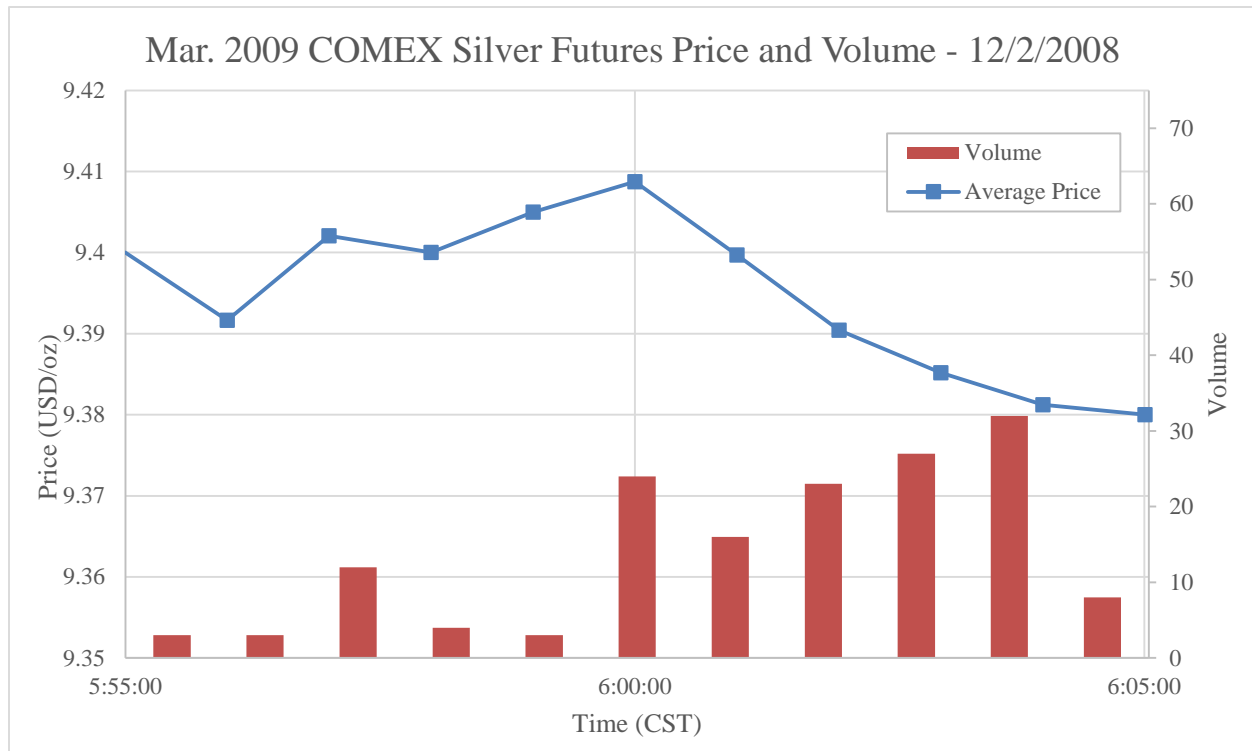
219. The analysis split the Target Window into two halves, the five minute period before the start of the Silver Fix, 11:55 A.M. - 12:00 P.M. London time (the "Pre-Fixing Window"), and the five minute period after the start of the Silver Fixing, 12:00 P.M. - 12:05 PM London time (the "Post-Fixing Window").



220. Plaintiffs then calculated the average price trend for COMEX silver futures contracts during the Pre-Fixing Window and compared that to the average price trend during the Post-Fixing Window on days within the Analysis Period where the total trading volume during the Target Window was at least 100 contracts. Plaintiffs next screened for days where the slope of the price trend observed during the Pre-Fixing Window changed direction during the Post-Fixing Window. Plaintiffs further narrowed the results to include only those days where the change in slope was accompanied by an increase in trading volume during the Post-Fixing Window.

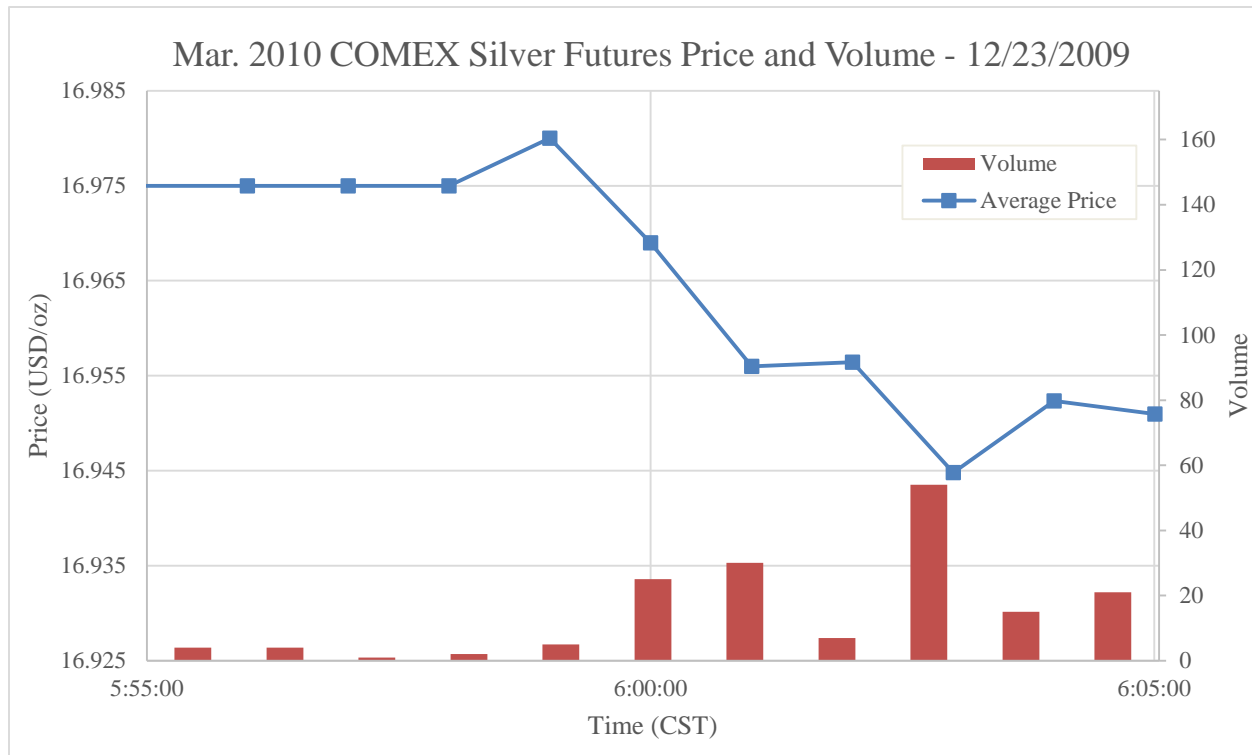
221. The combination of a directional change in price trend and an increase in trading volume during the Post-Fixing Window is consistent with information leaking from the Silver Fix to the public market as informed traders act on their knowledge of the Fix by placing trades in the COMEX silver futures market before the Fix is released to the public. This trading pattern, which was first identified by Plaintiffs' expert Mr. Caminschi, provides a considerable financial advantage to informed traders with knowledge of the Fix when compared to uninformed long silver market participants.

222. Plaintiffs' analysis uncovered hundreds of days throughout the Analysis Period where market activity in the nearby most active COMEX silver futures contract around the start of the Silver Fix met the pattern described above.

**FIGURE 55**

223. For example, Figure 55 illustrates the price and volume of the March 2009 COMEX silver futures contract between 6:55 A.M. and 7:05 A.M. Central Standard Time (“CST”) on December 2, 2008. Figure 55 shows a significant spike in trading volume beginning at 6:00 A.M. CST, coincident with the start of the Silver Fix. This spike in volume is significant, increasing almost fivefold from an average 5 contracts per minute prior to the start of the Fixing to almost 25 contracts per minute after the Fixing starts.

224. On December 2, 2008, the Silver Fix was \$9.41 per troy ounce, greater than the price of COMEX silver futures contracts at the start of the Fixing call. However, the price of COMEX silver futures contracts still decreased on heavy volume once the Fix started. This is consistent with the informed trading patterns described in Part 10.B *supra*.

**FIGURE 56**

225. Similarly, Figure 56 shows the price and volume changes for the March 2010 COMEX silver futures contract on December 23, 2009, another day identified by Plaintiffs' proprietary data mining software. In this chart, the price of COMEX silver futures begins to decrease around 5:59 A.M. CST, just before the start of the Silver Fix, on increasing volume. Once the fix starts, trading volume more than quadruples during the first 2 minutes, increasing from less than 5 contracts per minute to 25 contract per minute between 6:00 A.M. and 6:01 A.M. CST, and 30 contracts per minute between 6:01 A.M. and 6:02 A.M. CST.

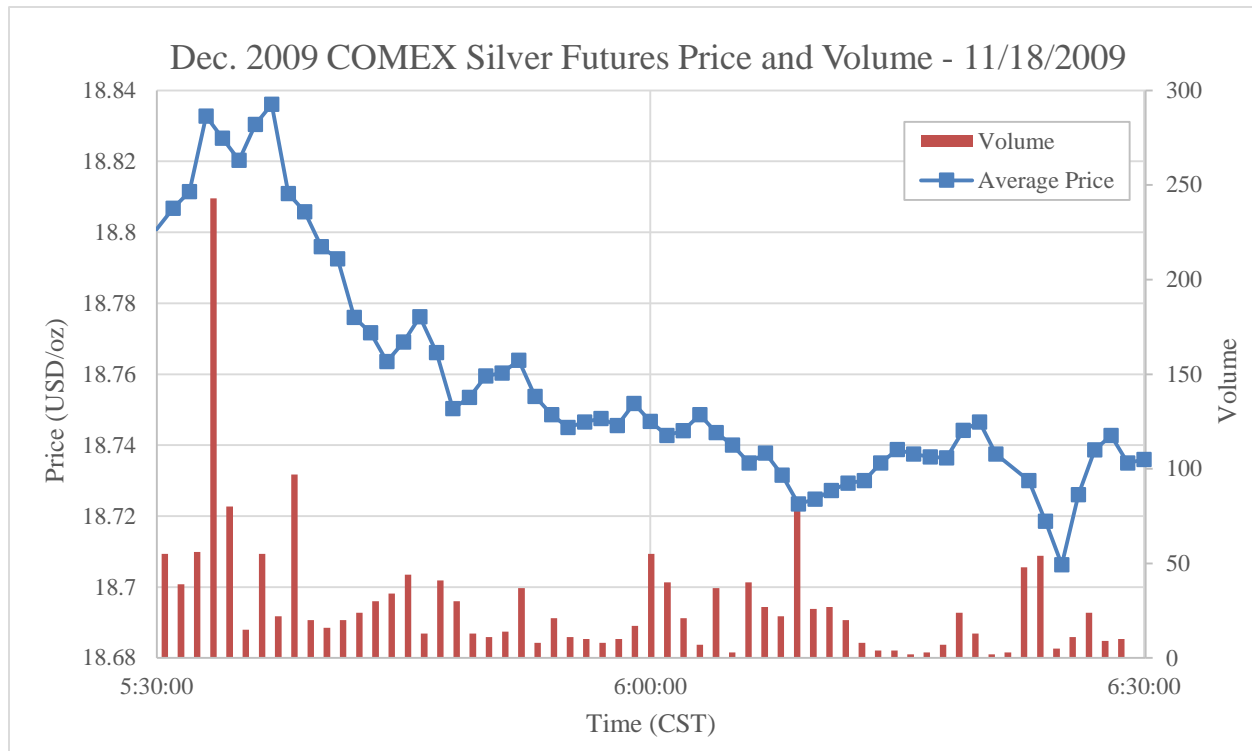
226. On December 23, 2009, the Silver Fix was \$16.92 per troy ounce, lower than the price of COMEX silver futures contracts at the start of the Fixing call. Thus the decrease in COMEX silver futures contracts on increasing volume during the first two minutes following the start of the Fix correctly predicted the Fix direction on this day. This is consistent with Plaintiffs' expert's observations that trades placed in the market after the start of the Fix are

highly predictive of the Fix results and indicative of trading by informed traders, like the Defendants.

227. Other days identified by Plaintiffs' proprietary software produced similar results, correctly predicting the direction of the Silver Fix almost 75% of the time. The predictive power of trading on these days is further evidence of trading by informed traders, like the Defendants, who used their knowledge of the Fix throughout the Class Period for their own financial benefit at the expense of Plaintiffs and Class Members.

228. Expanding on the predictive power of trading around the start of the Silver Fixing, Plaintiffs also analyzed COMEX silver futures data for large spikes in trading volume occurring during the 30 minutes before the start of the Silver Fixing. Plaintiffs screened days where the spike in volume occurring before the Fix was followed by a change in price trend of COMEX silver futures contracts that predicted the results of that days Silver Fixing.

229. Distinct from the pattern identified in Figures 55 and 56 above, which suggests collusion amongst the Defendants during the Silver Fixing, this pre-Fixing spike in volume and change in price trend is consistent with collusion before the start of the Silver Fixing about where the results should end up on that day. By predetermining the results of the Silver Fixing, Defendants can take full advantage of the difference in returns available to informed traders as described in Caminschi's analysis and represented in Figures 48 to 50 above.

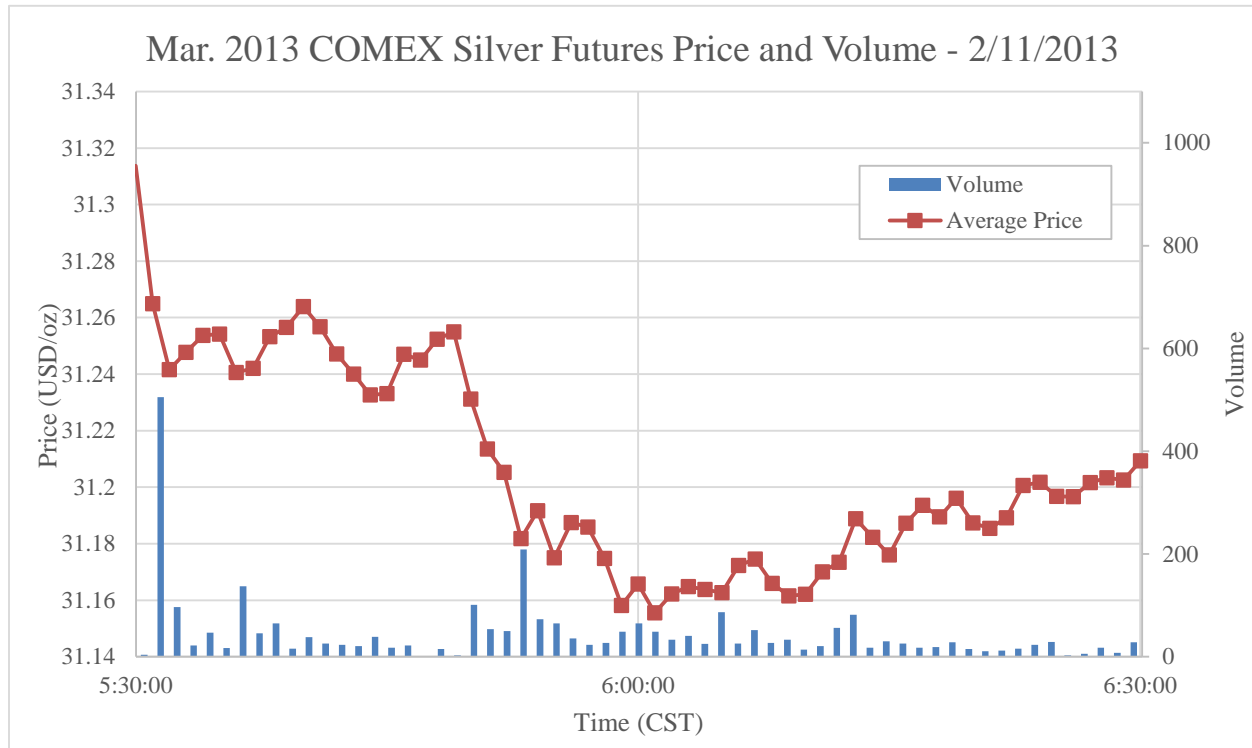


**FIGURE 57**

230. Figure 57 shows the price and volume of the December 2009 COMEX silver futures contract during the 30 minutes before and after the Silver Fix on November 18, 2009. Around 5:34 A.M. Central Standard Time, almost 26 minutes before the start of the Silver Fix, there is a large spike in volume, roughly five times larger than the total volume traded during each of the previous 3 minutes.

231. Prior to this volume spike, the price of the December 2009 COMEX silver futures contract is trending upward, moving from around \$18.80 per ounce of silver at 5:30 A.M. Central Standard Time to more than \$18.83 per ounce by 5:34 A.M. Central Standard Time. Following the volume spike, the price of the December 2009 COMEX silver futures contract changes direction and begins trending downward.

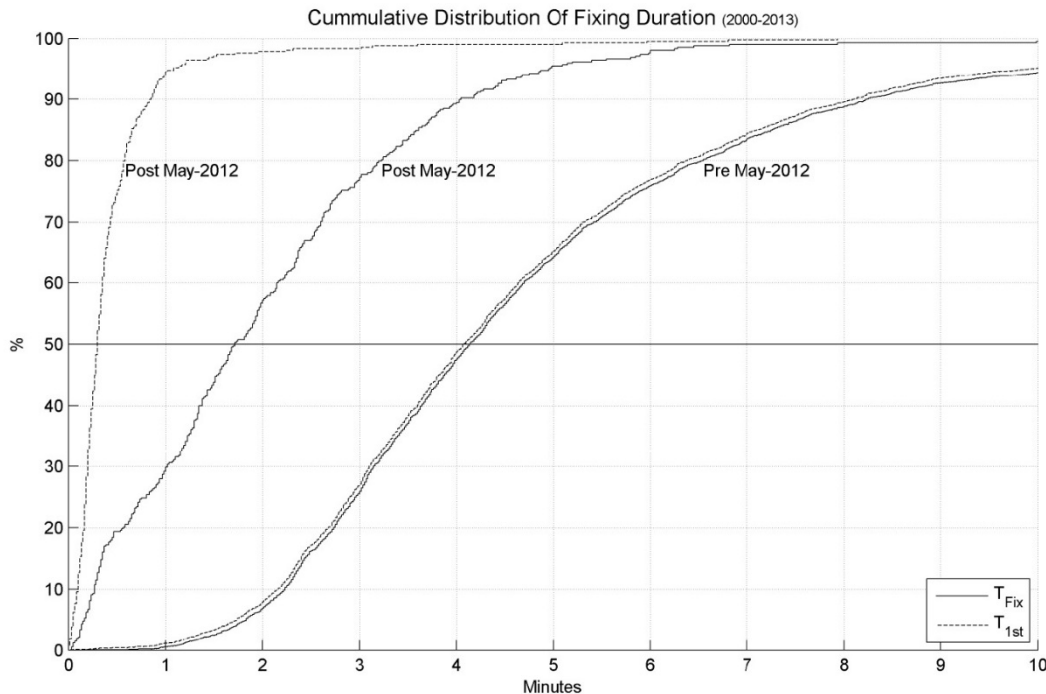
232. The downtrend displayed in Figure 57 correctly predicts the November 18, 2009 Silver Fixing of \$18.74 per ounce, about 10 cents per ounce lower than the price of silver when the volume spike occurs. But November 18, 2009, is just one example of more than 100 days that Plaintiffs have identified so far where trading in advance of the start of the fix suggests collusion between the Defendants and their co-conspirators about its results.



**FIGURE 58**

233. Figure 58 shows the price and volume of the March 2013 COMEX silver futures contract during the 30 minutes before and after the Silver Fixing on February 11, 2013. Just as displayed in Figure 57 above, on February 11, 2013, there is a large spike in volume, hundreds of times larger than the volume traded during the previous minute, occurring almost 30 minutes before the start of the Silver Fix. This volume spike is followed by a change in the price trend of the March 2013 COMEX silver futures contract, which begins to decrease in price from more

than \$31.30 per ounce at around 5:30 A.M. Central Standard Time, towards \$31.16 per ounce, the results of the Silver Fix on that day.



**FIGURE 59**

234. The change in price trend not only correctly predicts the outcome of the Silver Fix, but also occurs after a major structural change in the Fix that is highly suggestive of collusion. Figure 59 displays the cumulative distribution of the duration of the Silver Fixing from 2000 through 2013. The results are split into three categories. The curve on the far right represents the length of the Silver Fixing prior to May 2012. Tracing this curve shows that from January 2000 through May 2012, the Silver Fixing lasted, on average, 4 minutes, with 50% of fixings completing by that time. The second curve displays the cumulative distribution of the length of the Silver Fixing after May 2012. Significantly, during this time period, the average length of the Silver Fixing decreases dramatically, with 50% of the Silver Fixings finishing in less than 2 minutes.

235. Given all that is involved in fixing the price of silver, as described *supra*, it is unlikely that the Defendants, absent collusion, could conduct a legitimate auction for silver bullion in less than two minutes. However, more surprising, are the results indicated by the third curve from the right, which displays the cumulative distribution of “first updates,” *i.e.*, notification about the current price of silver that are not the final fix result, after May 2012. Though the Fixing Members are not required to post updates about the Silver Fixing while it is in progress, on those days where they did post updates, after May 2012, the first update occurred on average less than 30 seconds after the Silver Fixing started. This is highly suggestive of collusion amongst the Defendants prior to the start of the Silver Fixing since, absent prior discussion, it is highly unlikely that a legitimate price could be reached in such a short time.

**D. Plaintiffs were Injured by Transacting at Artificial Prices Proximally Caused by Defendants’ Manipulative Conduct**

236. Throughout the Class Period, Plaintiffs sold both physical silver and silver financial instruments, including COMEX silver futures contracts, the prices of which were directly impacted by the Silver Fixing.

237. As described above, Defendants and their co-conspirators artificially suppressed the price of silver throughout the Class Period. As a result, Plaintiffs transacted at artificially lower prices each time they sold physical silver or silver financial instruments, and received less than they otherwise would have in a competitive, unmanipulated market.

238. As a direct result of Defendants’ and their co-conspirators’ conduct, Plaintiffs were injured and suffered harm in the sales they conducted on days where the price of silver was artificially lower because of Defendants’ manipulative conduct, including but not limited to, the days and transactions set out in Appendix C.



239. For the reasons described above, the impact of the Defendants' and their co-conspirators' manipulative conduct persisted well beyond the end of the Silver Fixing, causing harm to Plaintiffs beyond the days set out in Appendix C.

240. Defendants' persistent suppression of silver prices also directly and proximately caused injury to Class Members who initiated long positions in silver and silver financial instruments at artificial prices, and held those positions through the Class Period. For example, Plaintiff Ceru, purchased physical silver at artificial prices during the Class Period and held that physical silver through Defendants' persistent suppression of silver prices. As a result, Ceru suffered legal injury as a direct and proximate result of Defendants' manipulative conduct which artificially reduced the value of silver purchased during the Class Period.

**XI. ANY OTHERWISE APPLICABLE STATUTES OF LIMITATIONS ARE TOLLED BY DEFENDANTS' ACTIVE AND FRAUDULENT CONCEALMENT**

241. Plaintiffs' disclaim any burden to plead facts regarding the statute of limitations.

242. The statute of limitations relating to the claims for relief alleged herein have been tolled because of fraudulent concealment by reason of Defendants' active and inherently self-concealing conduct. Plaintiffs' and members of the Class had no knowledge of Defendants' unlawful and self-concealing collusive, manipulative, and inequitable acts and could not have discovered them by the exercise of due diligence prior to the time Deutsche Bank announced its withdrawal from Silver Fixing in January 2014. Plaintiffs thus assert the tolling of the applicable statute of limitations affecting the rights of the claims of relief asserted by Plaintiffs. Defendants are also equitably estopped from asserting that any otherwise applicable limitations period has run.

243. Active acts of concealment by Defendants to conceal their violations of law from Plaintiff and the Class include, *inter alia*, avoiding discussing the manipulation of the Silver

Fixing in public forums and, when doing so, providing the public false and misleading information about the Silver Fixing.

244. By its very nature, as alleged herein, the unlawful activity that Defendants engaged in was self-concealing. By Defendants' affirmative acts, misrepresentations, and nondisclosures, any applicable statute of limitations on claims asserted by Plaintiffs and members of the Class has been and are tolled.

245. Moreover, Defendants actively concealed their conspiracy by placing a barrier for the public to access much of the information on the Silver Fixing website, [www.silverfixing.com](http://www.silverfixing.com). Upon visiting the website, the public was greeted ominously. Visitors were allowed to see nothing without entering into "Terms and Conditions," which required visitors to enter into an ostensibly onerous "contract" with London Market Silver Fixing, Ltd. Any person or entity wishing to learn about the Silver Fix directly from Silver Price Fixing Limited itself was thus faced with a substantial deterrent to investigation.

## **XII. CLASS ACTION ALLEGATIONS**

246. Plaintiffs bring this action on behalf of themselves and, under Rules 23(a) and (b) of the Federal Rules of Civil Procedure, on behalf of a Class defined as follows:

All persons or entities that transacted in physical silver or a silver financial instrument priced, benchmarked, and/or settled to the London Silver Fix at any time from January 1, 1999 through the date on which the effects of Defendants' unlawful conduct cease (the "Class").

247. Excluded from the Class are Defendants, and their officers, directors, management, employees, subsidiaries, or affiliates. Also excluded is the Judge presiding over

this action, his or her law clerks, spouse, and any person within the third degree of relationship living in the Judge's household and the spouse of such a person.<sup>111</sup>

248. Members of the Class are so numerous and geographically dispersed that joinder is impracticable. Further, the Class is readily identifiable from information and records in the possession of Defendants.

249. Plaintiffs' claims are typical of the claims of the members of the Class. Plaintiffs and members of the Class were damaged by the same wrongful conduct of Defendants.

250. Plaintiffs will fairly and adequately protect and represent the interests of the Class. The interests of the Plaintiffs are coincident with, and not antagonistic to, those of the Class.

251. Plaintiffs are represented by counsel with experience in the prosecution of class action antitrust, commodity manipulation, and other complex litigation, including involving precious and non-ferrous metals and financial benchmark rate collusion and manipulation.

252. Questions of law and fact common to the members of the Class predominate over questions that may affect only individual Class members, thereby making damages with respect to the Class as a whole appropriate. Questions of law and fact common to the Class include, but are not limited to:

- a. Whether Defendants unreasonably restrained trade in violation of federal antitrust law;
- b. Whether Defendants unreasonably restrained trade in violation of New York antitrust law;

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<sup>111</sup> Plaintiffs have defined the Class based on currently available information and hereby reserves the right to amend the definition of the Class, including, without limitation, the Class Period.

- c. Whether Defendants manipulated the price of silver and financial instruments tied to the price of physical silver, such as silver futures, options and other silver financial instruments;
- d. Whether Defendants were unjustly enriched;
- e. The length of the alleged conspiracy;
- f. Damages suffered by Plaintiffs and members of the Class; and
- g. Whether Defendants have acted or refused to act on grounds generally applicable to the Class, thereby making appropriate final injunctive relief or corresponding declaratory relief with respect to the Class as a whole.

253. Class action treatment is a superior method for the fair and efficient adjudication of the controversy. Such treatment will permit a large number of similarly situated persons to prosecute their common claims in a single forum simultaneously, efficiently and without the unnecessary duplication of evidence, effort or expense that numerous individual actions would require. The benefits of proceeding through the class mechanism, including providing injured persons or entities a method for obtaining redress on claims that could not practicably be pursued individually, substantially outweighs potential difficulties in management of this class action.

254. Plaintiffs know of no special difficulty to be encountered in the maintenance of this action that would preclude its maintenance as a class action.

255. Under *Shady Grove Orthopedic Assocs., P.A. v. Allstate Ins. Co.*, 559 U.S. 393 (2010), a federal class action may prosecuted as to the Donnelly Act and other state law claims under Rule 23 of the Federal Rules of Civil Procedure.

### **XIII. CLAIMS FOR RELIEF**

#### **FIRST CLAIM FOR RELIEF CONSPIRACY IN UNREASONABLE RESTRAINT OF TRADE: SHERMAN ANTITRUST ACT**

256. Plaintiffs incorporate by reference and re-allege the preceding allegations as though fully set forth herein.

257. The combination and conspiracy alleged herein is a *per se* violation of Section 1 of the Sherman Antitrust Act of 1890, 15 U.S.C. § 1 (as amended).

258. Alternatively, the combination and conspiracy alleged herein is a quick look or rule of reason violation of Section 1 of the Sherman Antitrust Act.

259. Defendants intended to and actually did restrain trade. They shared a conscious commitment to a common scheme designed to achieve the unlawful objective of artificially fixing, depressing, raising, pegging, maintaining, stabilizing, and otherwise manipulating the price of physical silver and financial instruments tied to the price of physical silver, including COMEX silver futures.

260. The conspiracy unreasonably restrained trade. There is no legitimate business justification for, or procompetitive benefits caused by, Defendants' unreasonable restraint of trade. Any ostensible procompetitive benefit was pretextual or could have been achieved by less restrictive means.

261. Plaintiffs and members of the Class have been injured in their business and property by reason of Defendants' violation of Section 1 of the Sherman Antitrust Act, 15 U.S.C. § 1, within the meaning of Section 4 of the Clayton Antitrust Act, 15 U.S.C. § 15.

262. Plaintiffs and members of the Class are threatened with impending future injury to their business and property by reason of Defendants' continuing violation of Section 1 of the

Sherman Antitrust Act, 15 U.S.C. § 1, within the meaning of Section 16 of the Clayton Antitrust Act, 15 U.S.C. § 26.

**SECOND CLAIM FOR RELIEF  
CONSPIRACY IN UNREASONABLE RESTRAINT OF TRADE:  
DONNELLY ANTITRUST ACT**

263. Plaintiffs incorporate by reference and re-allege the preceding allegations as though fully set forth herein.

264. The aforementioned acts and practices by Defendants were and are in violation of the New York Donnelly Antitrust Act, New York General Business Law § 340, *et seq.*

265. It is appropriate to apply New York antitrust law to direct purchases of physical silver and financial instruments tied to the price of physical silver, including silver futures options and other silver financial instruments, in all fifty states because the illegal conspiracy, overt acts in furtherance thereof, manipulation, and other anticompetitive conduct occurred in New York.

266. Defendants reside, are registered, conduct significant business, and/or own property in New York, including vast caches of silver bullion. The COMEX is located in New York.

267. Defendants' in-state conduct caused substantial out-of-state injuries to Plaintiffs and the proposed nationwide class and had a significant impact on the intrastate commerce of New York. By way of example, Plaintiffs and proposed members of the Class traded silver futures and options, and other silver financial instruments on the COMEX, which were fixed and manipulated by the unlawful actions of Defendants.

268. As a direct and proximate result, Plaintiffs and members of the Class have been injured in their business and property in that they had to pay artificially high price premiums for

primary aluminum. Unless injunctive relief, including structural injunctive relief, is granted, these violations may continue to reoccur.

269. It is appropriate to prosecute this state law claim on a class basis under *Shady Grove Orthopedic Assocs., P.A. v. Allstate Ins. Co.*, 559 U.S. 393 (2010).

**THIRD CLAIM FOR RELIEF  
PRICE MANIPULATION:  
COMMODITY EXCHANGE ACT**

270. Plaintiffs incorporate by reference and re-allege the preceding allegations as though fully set forth herein.

271. Defendants, through their acts alleged herein, specifically intended to and did cause unlawful and artificial prices in silver and silver financial instruments, including COMEX silver futures contracts in violation of the CEA, 7 U.S.C. § 1, *et seq.*

272. Each Defendant individually had and all Defendants collectively had the ability to cause and did cause artificial prices.

273. The Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank”) amended Section 6(c)(1) to the CEA. Under Section 6(c)(1), codified at 7 U.S.C. § 9, and Section 22 of the CEA, as amended, 7 U.S.C. § 25, it is unlawful for any person, directly or indirectly, to use or employ or attempt to use or employ, in connection with any swap, or a contract of sale of any commodity in interstate commerce, or for future delivery on or subject to the rules of any registered entity, any manipulative or deceptive device or contrivance, in contravention of such rules and regulations as the CFTC, shall promulgate not later than one year after July 21, 2010, the date of enactment of Dodd-Frank.

274. The CFTC promulgated Rule 180.1(a), 17 C.F.R. § 180.1(a), in July 2011.

275. Defendants also violated CFTC Rule 180.1(a), by *inter alia*, trading silver and silver financial instruments, including COMEX silver futures, based on non-public inside

information obtained and used by them in breach of their duty as Silver Fixing panel members. Defendants, as sophisticated market participants responsible for the setting of global silver prices, had a duty to set prices reflective of legitimate supply and demand fundamentals, and not cause, exacerbate or further any manipulation of silver or silver futures prices. Instead, Defendants abused their position of trust and breached their duties and responsibilities as Silver Fixing panel members to cause a specifically plead price artificiality in silver and silver futures prices. These acts rendered Defendants' pre-arranged execution of COMEX silver futures positions before and around the Silver Fixing an illegitimate part of the supply-demand equation for the prices of COMEX silver futures contracts and other silver financial instruments.

276. As a direct result of Defendants' unlawful conduct, Plaintiffs and members of the Class have suffered actual damages and injury in fact due to artificial COMEX silver futures contract prices to which they would not have been subject but for the unlawful conduct of the Defendants as alleged herein. Plaintiffs and members of the Class were further legally injured and suffered injury in fact that they transacted in silver financial instruments, including silver futures, options and other silver financial instruments, in an artificial and manipulated market operating under the artificial prices caused by the Defendants. Defendants' conduct is presumed to have caused injury to the Plaintiffs and the Class.

277. Plaintiffs and members of the Class who purchased or sold silver financial instruments, including silver futures and options contracts, during the Class Period were injured and are each entitled to their actual damages for the violations of the CEA alleged herein.

**FOURTH CLAIM FOR RELIEF  
PRINCIPAL-AGENT LIABILITY: CEA**

278. Plaintiffs incorporate by reference and re-allege the preceding allegations as though fully set forth herein.



279. Each Defendant is liable under Section 2(a)(1) of the CEA, 7 U.S.C. §2(a)(1), for the manipulative acts of their agents, representatives and/or other persons acting for them in the scope of their employment.

280. Plaintiffs and members of the Class are each entitled to actual damages sustained in silver financial instruments, including silver futures and options contracts, for the violations of the CEA alleged herein.

**FIFTH CLAIM FOR RELIEF  
AIDING AND ABETTING: CEA**

281. Plaintiffs incorporate by reference and re-allege the preceding allegations, as though fully set forth herein.

282. The Defendants each knowingly aided, abetted, counseled, induced and/or procured the violations of the CEA by other Defendants as alleged herein. Each Defendant did so knowing of other Defendants' manipulation of the Silver Fix, and silver futures, options and other silver financial instruments, and substantially and willfully intended to assist these manipulations to cause the prices of COMEX silver futures contract prices to be artificial during the Class Period, in violation of §22(a)(1) of the CEA, 7 U.S.C. §25(a)(1).

283. Under §13(c)(a) of the CEA, 7 U.S.C. §13, Defendants are liable for willfully intending to assist the manipulation.

284. Other persons willfully intended to assist these manipulations to cause the price of silver financial instruments to reach artificial levels during the Class Period, in violation of Section 22(a)(1) of the CEA, 7 U.S.C. § 25(a)(1). They are the agents and unnamed co-conspirators as alleged herein.

285. Plaintiffs and members of the Class are each entitled to actual damages sustained in silver futures, options, and other silver financial instruments for the violations of the CEA alleged herein.

**SIXTH CLAIM FOR RELIEF  
UNJUST ENRICHMENT  
COMMON LAW**

286. Plaintiffs incorporate by reference and re-allege the preceding allegations as though fully set forth herein.

287. Plaintiffs are entitled to recovery under State law for unjust enrichment and disgorgement of profits under common law principles of unjust enrichment in each of the fifty States, excluding Ohio and Indiana, and including Puerto Rico and the District of Columbia.

288. Each Defendant unjustly enriched itself from its intentional manipulation of silver prices through its conduct and omissions alleged herein, while knowing that Defendants had the ability to cause and that they were causing prices to be set at artificial levels.

289. Plaintiffs' and members of the Class's detriment and Defendants' unjust enrichment were related to and flowed from the wrongful conduct alleged herein, including, without limitation, Defendants' unlawful, manipulative, conspiratorial, and anti-competitive acts described above.

290. Under common law principles of unjust enrichment, Defendants should not be permitted to retain the benefits conferred by members of the Class, which is entitled to disgorgement of all profits resulting from such manipulation and establishment of a constructive trust from which members of the Class may seek restitution.

291. Plaintiffs and the Class have no adequate remedy at law to seek restitution under common law principles of unjust enrichment.

#### **XIV. PRAYER FOR RELIEF**

WHEREFORE, Plaintiffs, on behalf of themselves and the Class, respectfully prays the Court for a judgment, as follows:

##### **A. Judgment of Violation of the Sherman Antitrust Act**

292. Plaintiffs pray that the Court adjudge and decree that Defendants violated the Sherman Antitrust Act, 15 U.S.C. § 1, and enter joint and several judgments against Defendants in favor of Plaintiffs and members of the Class.

##### **B. Standing under the Clayton Antitrust Act**

293. Plaintiffs pray that the Court adjudge and decree that Plaintiffs and members of the Class have antitrust standing under Sections 4 and 16 of the Clayton Antitrust Act, 15 U.S.C. §§ 15 & 26, to bring suit for Defendants violations of the Sherman Antitrust Act, 15 U.S.C. § 1.

##### **C. Judgment of Violation of the Donnelly Antitrust Act**

294. Plaintiffs pray that the Court adjudge and decree that Defendants violated the New York Donnelly Antitrust Act, New York General Business Law § 340, *et seq.*, and enter joint and several judgments against Defendants in favor of Plaintiffs and members of the Class.

##### **D. Judgment of Violation of the Commodity Exchange Act**

295. Plaintiffs pray that the Court adjudge and decree that Defendants violated the Commodities Exchange Act, 7 U.S.C. § 1, *et seq.* and enter joint and several judgments against Defendants in favor of Plaintiffs and members of the Class.

##### **E. Certification of Plaintiff Class under Rules 23(a) & (b) of the Federal Rules of Civil Procedure**

296. Plaintiffs pray that the Court Order that this action may be maintained as a class action pursuant to Rules 23(a) & (b) of the Federal Rules of Civil Procedure, that they be named

Class Representatives, that the undersigned be named Co-Lead Class Counsel, and that reasonable notice of this action, as provided by Fed. R. Civ. P. 23(c)(2), be given to the Class.

**F. Treble Damages**

297. Plaintiffs pray that the Court award three times the damages suffered by reason of Defendants' violations of law.

**G. Punitive Damages**

298. Plaintiffs pray that the Court award punitive damages.

**H. Disgorgement and Restitution**

299. Plaintiffs pray that Defendants be made to disgorge their ill-gotten gains from which a constructive trust be established for restitution to Plaintiffs and members of the Class.

**I. Costs of Suit**

300. Plaintiffs pray that the Court award reasonable costs of suit.

**J. Pre- and Post-Judgment Interest**

301. Plaintiffs pray that the Court award pre- and post-judgment interest.

**K. Reasonable Attorney's Fees**

302. Plaintiffs pray that the Court award reasonable attorney's fees.

**L. Other Just and Proper Relief**

303. Plaintiffs pray that the Court grants such other, further and different relief as is just and proper.

**XV. DEMAND FOR JURY TRIAL**

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiffs, on behalf of themselves and members of the proposed Class, respectfully demands a trial by jury on all issues so triable.

Dated: January 26, 2015.

Respectfully submitted,



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